#### 7.0 CUMULATIVE IMPACTS

The State CEQA Guidelines (Section 15355) state that a cumulative impact is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. Section 15130 of the CEQA Guidelines requires that an EIR address cumulative impacts of a project when the project's incremental effect would be cumulatively considerable, wherein "cumulatively considerable" refers to the individual project's effect with respect to past, current and probable projects. This section addresses the cumulative impacts of implementing the Salk Institute Master Plan project (proposed project) in conjunction with other projects in the area.

#### 7.1 CUMULATIVE PROJECTS SETTING

Projects in the vicinity of the proposed project considered for the analysis of cumulative issues (i.e., land use, visual quality/neighborhood character, biological resources, historical resources, traffic/circulation, air quality, noise, hydrology/water quality, geology and paleontological resources) are mapped in Figure 7-1, Cumulative Projects, and briefly described in Table 7-1, List of Cumulative Projects In Study Area. The study area for the cumulative analysis includes all development and transportation projects in the western portion of the University Community Plan area that were deemed by the City as likely to contribute to the cumulative impacts analysis for the proposed project, given their location on the same circulation system and within the same geographic area. Development projects within the La Jolla Community Plan area were excluded from the cumulative analysis because they would affect a different circulation system and are geographically separated from the Salk Institute (Institute) campus by UCSD property.

Table 7-1 LIST OF CUMULATIVE PROJECTS IN STUDY AREA					
Project Name		Description			
1	University of California, San Diego 2004 Long Range Development Plan (LRDP)	Function	2002-2003 (Actual gsf*)	2020-2021 (Projected gsf*)	
		Academic	5,156,000	9,437,000	
		Administration/General Services	718,000	891,000	
		Public Venue and Sports	823,000	1,401,000	
		Housing and Dining	3,059,000	5,594,000	
		Hospital and Clinics	326,000	1,186,000	
		Science and Research Park		650,000	
		Total	10,082,000	19,159,000	
2		Increase the number of lanes on La Jolla Village Drive from I-5 to			
	La Jolla Village Drive	Revelle College Drive, widen Gilman Drive overcrossing and			
	Widening	reconfigure intersections along this segment. Project construction will			
		be complete in late 2005.			

	Table 7-1 (cont.)				
	LIST OF CU	JMULATIVE PROJECTS IN STUDY AREA			
Project Name Description					
	Project Name	Description			
3	I-5/La Jolla Village Drive Overcrossing and Interchange	Widen 7,000 feet of roadway, including the overcrossing, and improve other conditions at the interchange			
4	I-5/Genesee Avenue Interchange	Widen and lengthen existing Genesee Avenue bridge. Project has been linked up with I-5/Sorrento Valley Road Interchange project listed belowConstruction timing depends on engineering, environmental and funding schedule of the combined project.			
5	North Coast Interstate 5 HOV/Managed Lane	Construct managed lanes in each direction on I-5 from La Jolla Village Drive north to Harbor Drive in Oceanside. Environmental studies should be completed in 2008, with construction beginning in 2009.			
6	I-5/Sorrento Valley Road Interchange	Redesign I-5/Sorrento Valley Road interchange and add auxiliary lanes between La Jolla Village Drive and Sorrento Valley Road. Project linked to I-5/Genesee Avenue Interchange project. Construction timing depends on engineering, environmental and funding schedule of the combined project.			
7	I-5/I-805 Widening	Construct a separate freeway bypass system from the junction of I-5 and I-805 to the Del Mar Heights Road interchange. Project is currently under construction, with northbound lanes opening to traffic in Fall 2005 and completion of project anticipated in Fall 2007.			
8	University Area Super Loop Bus	High-frequency commuter bus project that would serve the campus and the rest of the University Community (engineering and environmental work currently being conducted by SANDAG)			
9	Mid-Coast Light Rail Transit	Construct an 11-mile extension of the San Diego trolley system from the Old Town Transit Center to University City. Environmental and preliminary engineering is commencing.			
10	Hillel of San Diego	Construct a 12,100-square foot student center on a vacant lot bounded by La Jolla Village Drive, La Jolla Scenic Way, and La Jolla Scenic Drive. Project approved May 2006 resubmitted in May 2008 after court ruling.			

Sources: USAI 2006; UCSD 2004a; City of San Diego 20062008

As shown in Table 7-1, cumulative projects in the study area include the UCSD 2004 LRDP, which proposes to add classrooms, housing, science and research facilities, administration offices and parking to various locations within the campus. The 2004 LRDP Land Use Plan identifies Academic, Recreation and Sports, and Administration uses north of the Institute property and Housing, Academic, and Sports and Recreation uses to the east (see Figure 5.1-4 for a graphic depiction of the land use plan for the UCSD campus). Other projects considered in the cumulative analysis include transportation improvement projects that will widen La Jolla Village Drive; improve I-5 interchanges at Genesee Avenue, La Jolla Village Drive and Sorrento Valley Road; construct managed lanes on I-5 north of La Jolla Village Drive; and improve the I-5/I-805 merge. Planned public transportation projects include the University Area Super Loop Bus and the Mid-Coast Light Rail Transit (LRT) projects. A private student center adjacent to the UCSD campus is also included in the cumulative analysis.

<sup>\*</sup> gross square feet



SALK INSTITUTE

Figure 7-1

The analysis of cumulative impacts associated with regional issues (e.g., air quality) is based on regional plans and policies, such as the Circulation Element of the *University Community Plan* (Community Plan) and *Progress Guide and General Plan* (General Plan), and the Multiple Species Conservation Program (MSCP) and City of San Diego's MSCP Subarea Plan, County of San Diego's Regional Transportation Plan (RTP), State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS).

#### 7.2 CUMULATIVE EFFECTS ANALYSIS

Cumulatively significant impacts are assessed when the proposed project would contribute to a known existing significant impact occurring in a community where additional incremental effects would exacerbate the impact. Section 5.0, *Environmental Analysis*, of this report identified significant impacts of the proposed project in the areas of land use, biological resources, historical resources, traffic/circulation, noise (construction-related), hydrology/water quality, and paleontological resources (addressed in Section 5.0, *Environmental Analysis*). Less than significant impacts are identified for other disciplines.

As noted in the Preface to this Final EIR, the applicant has decided to eliminate the employee daycare facility and temporary housing quarters from the proposed Salk Institute Master Plan. Although no longer a part of the proposed project, the environmental analyses of these components remain in the EIR because their removal from the Master Plan has little bearing on the conclusions reached in this section.

#### 7.2.1 Land Use

Expansion of research facilities and the addition of ancillary uses, including a daycare facility and temporary housing, at the Institute would be consistent with the planned land use on site as outlined in the General Plan, Community Plan and the North City Local Coastal Program/Land Use Program (LCP). As such, the proposed project would be consistent with the policies within the applicable planning documents. No other private development proposals are within the cumulative setting identified for the proposed project. UCSD has planned development in the vicinity of the proposed project. Local land use policies are not enforceable on or applicable to the UCSD campus, however, and continued expansion of UCSD (through the implementation of the 2004 LRDP) would be consistent with the Community Plan in terms of the development intensity (traffic volumes) allocated to the University. In addition, UCSD staff and committees would evaluate each project for consistency with campus planning goals and neighboring land uses to address any potential land use issues during the project planning process. Further, UCSD is required to obtain a Coastal Development Permit (CDP) directly from the California Coastal Commission (CCC) for development in the vicinity of the Institute campus. The CCC has specific policies related to protecting public access and scenic and visual qualities of the coast that would be applicable to the UCSD campus.

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Therefore, no cumulative land use policy inconsistencies would arise since any UCSD project proposed near the Institute would be exempt from local policy review. However, CCC review of any future buildings in the coastal zone on campus would likely address similar issues to those addressed by local land use policies. No physical land use inconsistencies are anticipated between the proposed project and any Academic, Recreation and Sports, Housing and Administration uses of UCSD property to the north and east of the project site since those types of institutional uses are complimentary with the Institute campus. All other cumulative projects in the area would be consistent with the RTP and would not have any affect on land use policy or development intensity in the vicinity of the proposed project. Therefore, the proposed project at the Institute, combined with other planned development in the cumulative study area, would not result in cumulatively significant land use compatibility impacts.

The proposed project would be required to comply with the MSCP and City MSCP Subarea Plan, which were developed to address cumulative impacts to sensitive habitats and the species that depend on such habitats. As described in Section 5.1, Land Use, of this report, the proposed project's impact to biological resources and adjustment of land into the MHPA would result in a net addition of 3.22 acres of moderate to high quality habitat. Other projects in the study area would have to demonstrate that any impacts to resources protected by the MSCP would be offset through mitigation consistent with the provisions of the MSCP Subarea Plan. In contrast, UCSD is a constitutionally created unit of the State of California which is not subject to municipal plans, policies and regulations and is not enrolled in the MSCP. Nonetheless, it is a trustee agency for its natural reserves and the goals of the 2004 LRDP include open space preservation and mitigation that is generally consistent with the intent of the MSCP (UCSD 2004b). Thus, cumulatively significant impacts to policies protecting biological resources would not result.

#### 7.2.2 <u>Visual Quality/Neighborhood Character</u>

As discussed under Section 5.2, Visual Quality/Neighborhood Character, the proposed project would not substantially block views of the Pacific Ocean or scenic coastal areas from Torrey Pines Scenic Drive and would not affect any views from Torrey Pines City Park west of the project site. Of the cumulative projects considered in this analysis, development of the northwest portion of the UCSD campus (and in particular the undeveloped land north of the Institute property along Torrey Pines Scenic Drive) has the most potential to affect these same sensitive views. Existing westerly views of the ocean and coastal areas from Torrey Pines Scenic Drive across the undeveloped UCSD property are limited due to topography (which blocks long-range views for over half the length of the street) and the curvature of the road (which focuses views due west of the travel lanes away from the UCSD property); therefore, potential development of academic buildings would likely intervene less with existing views than the proposed project, where the dominant views of the ocean and scenic coastal areas occur. However, development of academic uses on undeveloped land on the north side of the road would change the character of the streetscape and, depending on the configuration, height and massing of the buildings, could contribute to an obstruction of views of the ocean and scenic coastal areas from

the street. Similar to the proposed project, such views from public vantage points within Torrey Pines City Park would remain unaffected by potential UCSD development due to its location east of the park.

According to the 2004 LRPD EIR, the potential exists for UCSD development to block westerly ocean views from a viewshed in the northern portion of the campus that is west of the Institute campus, specifically Ridge Walk (UCSD 2004b). Users of Ridge Walk are UCSD students, faculty and visitors associated with RIMAC events and would not be the same individuals affected by the proposed Institute project (i.e., drivers along Torrey Pines Scenic Drive). Nonetheless, because development on UCSD property adjacent to the Institute would occur within a visually sensitive part of campus, design review would be conducted by the UCSD Design Review Board (DRB) to ensure the design is consistent with the character of the area and that viewshed impacts are minimized (UCSD 2004b). If the potential for view blockage exists, UCSD planners, the project architect and the project engineer would work together to maximize view preservation through altered building massing; selecting exterior treatments and/or windows to reduce visibility or contrast; providing viewing areas within or through proposed development; and designing landscape in a manner that reduces view obstructions (UCSD 2004b). Because limited views exist and UCSD would implement a design review process and would integrate measures to minimize intrusions, potential cumulative impacts to views of the ocean and scenic coastal areas from Torrey Pines Scenic Drive would be considered less than significant.

Potential cumulative increases in light and glare associated with development of the proposed project, in conjunction with the UCSD property, would be less than significant due to the removal of overhead parking lights in both locations, project compliance with the San Diego Municipal Code (SDMC) lighting requirements and UCSD's implementation of design review and campus compliance with the UCSD Outdoor Lighting Policy and Outdoor Lighting Design Guidelines.

#### 7.2.3 Biological Resources

Implementation of the proposed project and other projects in the area would contribute to the loss of sensitive habitats, direct and indirect impacts to covered species (in particular the coastal California gnatcatcher) and direct and indirect impacts to habitat within the Multiple Habitat Planning Area (MHPA). The proposed project would not result in direct impacts to any naturally occurring wetland habitat or any Corps or CDFG jurisdictional areas. Other projects in the area have the potential, however, to impact such resources due to the presence of canyons and natural drainages nearby. Habitat impacts for projects within the City would be offset by required conformance with the City's MSCP Subarea Plan/MHPA Land Use Adjacency Guidelines and implementation of any applicable wetland permit conditions. Implementation of the UCSD 2004 LRDP would also have the potential to increase impacts to native vegetation communities within the MSCP study area that surrounds the campus by less than 0.01 percent (UCSD 2004b). Projects on the UCSD campus have the potential to impact the coastal California gnatcatcher and potentially contribute to impacts to four other

covered species. The campus open space system would provide for the conservation of habitats, including those for covered species. The UCSD LRDP EIR contains mitigation to address direct and indirect impacts to all sensitive habitats and species occurring on campus and provides a framework for managing the open space system on campus (UCSD 2004b).

The proposed project and other cumulative projects would contribute to the incremental loss of native habitats that is occurring within the City and along the coast, in particular. This project's contribution to these impacts is considered minimal due to the fact that proposed habitat loss would primarily occur outside the MHPA and would be compensated for in accordance with the MSCP requirements. Impacts to native habitat outside the MHPA were accounted for in the City's regional habitat conservation planning efforts. The proposed project's addition of 3.221.27 net acres of moderate- to high-quality habitat to the MHPA combined with UCSD's open space system would further improve regional habitat conservation above levels assumed in the MSCP.

Based on the mitigation requirements placed on all projects in the cumulative study area and the anticipated habitat conservation offered by the proposed project and the UCSD campus above levels assumed in the MSCP, the proposed project's contribution to impacts to biological resources would not be cumulatively significant.

#### 7.2.4 Historical Resources

In addition to the Institute's historic building, historic setting and potential Camp Callan-era resources described in Section 5.4, Historical Resources, the UCSD LRDP EIR identified historic resources on UCSD's campus include some remains of Camp Matthews and Camp Callan, the Torrey Pines Gliderport, and buildings within the Scripps Institution of Oceanography. Except for the Institute buildings and setting (which are unique to the project site and would not be affected by surrounding or cumulative development), historic structures similar to those found in the project area have been constructed elsewhere, both in the local region and at other locations in the United States, and are well documented, including extensive photographic inventory and architectural plans. The remaining military structures on the UCSD campus are not considered significant resources due to the loss of historical context and extent of site modification that has occurred since urban development of the area and university occupation of the Camp Callan and Camp Matthews properties (UCSD 2004). Similarly, the setting for any potential Camp Callan resources on the Institute property has also changed from when the campus was constructed in the mid-1960s. In addition, similar military structures and resources are preserved elsewhere in San Diego County. Therefore, the potential loss of historic resources would not be considered cumulatively considerable.

The proposed project site does not contain any known pre-historic archaeological resources, as discussed in Section 5.4, *Historical Resources*, of this report and no impacts to such resources are expected. If any such resources are encountered on site, impacts would be mitigated to below significance through Native American and archaeological monitoring. Therefore, the proposed project would not contribute to any cumulative impacts to archaeology in the area.

#### 7.2.5 Traffic/Circulation

As discussed in Section 5.5, Traffic/Circulation, the proposed project was analyzed under the Buildout With Project scenario (which by definition is a cumulative condition). The scenario assumed the complete buildout of the University Community Plan and the UCSD campus and that no new roads or connections would be constructed (consistent with the Community Plan). For the Buildout Without and With Project analyses it was determined that, although the LOS along some local street segments may be reduced, the majority of study area streets would operate at LOS D or better, with the exception of La Jolla Shores Drive south of Torrey Pines Road (LOS E) and Genesee Avenue between Science Center Drive and I-5 (LOS F). Although LOS E and LOS F are unacceptable, these roadway segment impacts would be the result of community and UCSD buildout and are anticipated to occur regardless of whether or not the proposed project is built (as shown in the Buildout Without Project condition in Table 5.5-12). The project's contribution to unacceptable LOS along these roadway segments would not result in a cumulatively considerable impact because project traffic would change the volume-to-capacity (v/c) ratio by less than 0.01.

The analyzed freeway segments would operate at LOS D or better under the Buildout Without and With Project conditions, with the exception of northbound I-5 from Genesee Avenue to Roselle Street during the PM peak hour period (LOS F), southbound I-5 from Roselle Street to Genesee Avenue during the AM peak hour period (LOS F), northbound I-5 from La Jolla Village Drive to Genesee Avenue during the PM peak hour period (LOS F), and southbound I-5 from Genesee Avenue to La Jolla Village Drive during the AM peak hour period (LOS F). Regional, community and UCSD buildout would contribute to these conditions and are anticipated to occur regardless of whether or not the proposed project is built (as shown in the Buildout Without Project condition in Table 5.5-14). The project's contribution to these cumulatively significant impacts would not be considerable because project traffic would change the volume-to-capacity ratio by less than 0.002.

The two freeway intersections in the study area would operate at less-than-acceptable LOS under the Buildout Without and With Project conditions; specifically, the I-5/Genesee Avenue interchange would operate at LOS F during both AM and PM peak hour periods with the exception of the southbound interchange during the PM peak hour period, which would operate at LOS E. Improvements planned by the City of San Diego at the I-5/Genesee Avenue interchange would involve the construction of a new overpass bridge with an extra through lane in each direction, as well as add extra left-turn lanes on northbound and southbound I-5 on-ramps. The Genesee Avenue

improvements have been combined with improvements planned along I-5 and at the I-5/Sorrento Valley Road interchange which are currently undergoing engineering and environmental analysis (see Table 7-1). The I-5 improvements are programmed in the San Diego RTP and the 2004 Federal Transportation Improvement Plan (FTIP). Federal and local funding is being sought for the interchange improvements and no construction schedule has been established at this time. Therefore, an interim improvement project (i.e., extended turn pocket through restriping) is planned by the City of San Diego on Genesee Avenue to provide additional storage capacity for the westbound approach to the southbound I-5 on-ramp until the programmed improvements can be constructed (Kimley-Horn and Associates 2005).

Similar to other development projects affecting the interchange, the Institute would be required to contribute funds toward mitigating cumulatively significant impacts and offsetting the costs of the interchange improvements. Regardless of the funding source, the interchange improvements are programmed and will be constructed to address cumulatively significant impacts. Because the proposed project would cause a direct impact at intersections of the interchange, the proposed project's contribution to cumulatively significant traffic impacts would be considerable. Neither the timing nor funding of the I-5/Genesee Avenue improvements are assured at this time, however, the project's contribution toward interchange improvements, as described in mitigation measure 5.5-1, would not mitigate cumulative impacts; therefore, such impacts would remain cumulatively significant and unmitigable until the ultimate improvements are constructed as some point in the future.

It should be noted that construction of many of the projects identified in the cumulative study area are transportation improvement-based projects and would not produce more traffic, but would instead offer relief from degraded conditions along freeways and their ramps and intersections by building more capacity into the regional transportation system. In addition, those public transit projects (i.e., alternative transportation projects) in the cumulative study area, such as the Super Loop and LRT, would provide drivers alternatives to traditional passenger vehicle travel and, thus, would further lessen automotive traffic in the area.

#### 7.2.6 Air Quality

The main source of air emissions associated with the Institute project and other projects in the cumulative project study area would be project-generated traffic. As discussed in Section 5.6, Air Quality, of this report, although cumulative traffic would cause LOS at the I-5/Genesee Avenue interchange to be E or worse during the buildout, the project's contribution to air emissions would not cause a carbon monoxide (CO) hot spot (see Section 5.6, Air Quality, of this report). The proposed project and other projects considered in this analysis would be consistent with the development intensity anticipated in the Community Plan, which the basis for the traffic assumptions used in projecting regional air emissions for the RAQS. Because the proposed project and other projects



would be consistent with the plans and programs upon which the RAQS is based, they would not obstruct or conflict with the air basin's ability to attain and maintain the ambient air quality standards. Therefore a significant cumulative impact on the ambient air quality would not occur and the project's contribution to cumulative pollutant emissions would not be considerable.

#### 7.2.7 Noise

Cumulative development of the project, in conjunction with the UCSD campus and the University Community Planning area would not result in a cumulative impact in terms of a substantial increase in ambient noise levels because traffic levels and related noise are not anticipated to substantially increase. In addition, the project would comply with the City's sound level limits for stationary noise at all property lines and would not combine with noise from possible UCSD development to worsen the impacts. Anticipated construction noise impacts would not combine with that of other projects proposed in the area since noise is localized and would not travel great distances and combine with that of the proposed project. Therefore, no cumulative noise impacts are anticipated.

#### 7.2.8 Hydrology/Water Quality

As described in Section 5.8, Hydrology/Water Quality, the proposed project would not result in a significant impact related to increases in impervious surface area or associated runoff levels or flow rates. Project implementation would retain the overall on- and off-site drainage patterns, with flows from the site continuing to enter storm drain facilities and/or adjacent natural areas and eventually draining to the coast via unnamed canyons to the west and north. Because of topography, many of the other projects in the study area would affect different drainages than the proposed project. The exception would be projects on the portion of the UCSD campus that are upstream and adjacent to the Institute project site. Much of the UCSD property is primarily developed with parking lots and if redeveloped would not substantially increase impervious surfaces or peak runoff quantities. For undeveloped land, such as the property north of the Salk Institute, mitigation from the 2004 LRDP EIR would require projects to control discharge volumes and durations on site (UCSD 2004b). Therefore, cumulatively significant hydrology impacts are not anticipated.

Potential cumulative water quality impacts associated with construction-related activities (erosion/sedimentation, use and storage of hazardous materials, and generation of demolished debris) and long-term operations and maintenance at the various project sites in the study area would be precluded through implementation of project-specific design, source control, and treatment control BMPs including those related to the NPDES permit and City Storm Water Standard/SUSMP requirements. For UCSD projects, the 2004 LRDP EIR requires projects on campus to implement measures to protect downstream areas from sediment and other pollutants. Therefore, implementation of BMP design features, conformance with all applicable permit and regulatory requirements and regulatory enforcement of those permit requirements by the RWQCB and City, and the entering into

a Storm Water Management and Discharge Control Maintenance Agreement with the City would avoid any potential for cumulatively significant water quality impacts.

#### 7.2.9 Geology

Potential impacts due to slope instability, seismic ground rupture or related effects, seismic ground acceleration or liquefaction at each of the projects in the study area, including the Institute project, is low due to the implementation of standard design, engineering and construction practices in conformance with existing regulatory requirements and industry guidelines. Potential project-related erosion and sedimentation impacts or potential impacts related to expansive soils and oversized materials would also be reduced below a level of significance based on the required conformance with existing regulatory standards and industry guidelines. Development on the UCSD campus would comply with the California Building Code and UC Seismic Safety Policy, which require the use of stringent seismic safety standards. The proposed project, along with other planned projects in the vicinity, would address potential geologic impacts on a site-specific basis and would not combine with those on other sites or result in impacts that would be cumulatively significant.

#### 7.2.10 Paleontology

As discussed in Section 5.510, Paleontological Resources, there is the potential for paleontological resources to occur within the proposed project area due to the presence of the Linda Vista and Scripps formations (moderate and high sensitivity, respectively). Measures to mitigate potential impacts to paleontological resources discovered during grading activities on site and on other project sites within the City would include the presence of a paleontological monitor during on-site grading. Mitigation measures to prevent impacts to paleontological resources on other projects in the cumulative study area would also be required. Although underlain by geologic formations with the potential for fossil resources, impacts to such resources from development of the UCSD campus were not considered significant in the 2004 LRDP EIR because no known significant fossil sites have been encountered during several years of paleontological monitoring on campus construction projects (UCSD 2004b). Therefore, the proposed project, in combination with cumulative projects listed in Table 7-1, would not result in cumulatively significant impacts to paleontological resources.

#### 8.0 ALTERNATIVES

In accordance with Section 15126.6(a) of the State CEQA Guidelines, an EIR shall describe "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project," as well as provide an evaluation of "the comparative merits of the alternatives." Under that section, "an EIR need not consider every conceivable alternative to the project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation."

This section provides potential alternatives to the proposed project and evaluates them as required by CEQA. Each major issue area included in the proposed project's detailed impact analysis (see Section 5.0, Environmental Analysis, of this EIR) is included in the analysis of the alternatives. In accordance with State CEQA Guidelines section 15126.6(d), "the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." The State CEQA Guidelines also require EIRs to identify the Environmentally Superior Alternative from among the alternatives (including the proposed project). A matrix comparing the various project alternatives and their anticipated environmental effects is provided as a summary at the end of this section. The rationale for selecting certain alternatives for detailed consideration is addressed in Section 8.3 of this report.

The project alternatives would strive to achieve the following basic objectives of the proposed project by providing a project that:

- Is compatible with the primary goals and objectives of the *University Community Plan* (Community Plan), the *North City Local Coastal Program Land Use Plan* (LCP) and applicable sections of the City of San Diego (City) Municipal Code (SDMC).
- Is consistent, in terms of general scope, planning and architectural theme, with Jonas Salk's original vision for the research institute property embodied in the tri-partite scheme developed by Jonas Salk and Louis Kahn in the 1961 Master Plan and Conditional Use Permit (CUP) No. 3841, which precludes urban densities in any one area, places housing and related accessory facilities on the south mesa, places scientific research space on the east mesa, constructs a community center for the Institute on the north mesa, maintains access to the natural setting and avoids inappropriate land use adjacencies.
- Allows the Institute to develop new and expanded scientific research facilities and reach its 500,000-sf capacity on site as provided for in the University Community Plan, while using the

Institute's funds in the most cost-effective manner possible and retaining the maximum possible funds for its core scientific mission.

- Helps the Institute remain competitive with other national research institutions in attracting
  and retaining top researchers by providing on-site amenities, such as an employee daycare
  facility and temporary housing quarterscommunity center, and state-of-the art scientific
  research facilities, that are respectful of the historic architecture and integrated with the
  surrounding open space.
- Provides state-of-the-art scientific research space that will help attract new research funding and train the best and brightest scientists in the world in an inspiring and collaborative setting with exceptional faculty and staff, and will house the specialized equipment technology to allow Institute employees to fulfill their institutional missions of fundamental discoveries in the life sciences, the improvement of human health and conditions and the training of future generations of scientists.
- Provides the centralized support facilities (i.e., Salk Community Center Building) for the
  Institute that will be placed on site in a manner that balances the sensitive natural and historic
  resources with the need for adequate site security.
- •Provides a private daycare facility on site that will educate and care for children of Institute personnel, while providing opportunities for outdoor learning, in a safe location that is both internally and externally secure, away from public roads, in close proximity to those employees and integrated into the natural landscape.
- Develops temporary housing quarters in a location on site that is physically separate from the scientific research work environment, is integrated into the natural landscape, and would provide visiting and new faculty/employees a temporary place to live while they attempt to secure permanent off-campus housing, as an alternative to the Institute paying market rates for off-site housing arrangements.
- Creates new underground parking areas on site that sufficiently satisfy the parking needs of the entire facility and minimizes surface parking.
- Preserves and enhances views of the ocean and scenic coastal resources recognized in applicable local, regional and state plans and policies.
- Enhances and expands environmental protection for environmentally sensitive areas on site by adding land to the City's Multiple H\u00e4bitat Planning Area (MHPA).

- Provides landscaping plans and architectural and landscape design guidelines to ensure creation of an aesthetically pleasing development project that complements the existing landscape and permanent structures on site, respects the site's historical integrity and landscape with high design standards and enhances publicly accessible views in the project area.
- Allows for the removal of all temporary buildings on the property.

As noted in the Preface to the Final EIR, the applicant has chosen to modify the proposed project and its objectives to by eliminateing the daycare facility and housing quarters, which were both considered ancillary uses to the overall scientific research use. These alternatives to the originally proposed project (i.e., Draft EIR Project) are still appropriate under CEQA, despite changes to the proposed project (i.e., Refined Project Design), because they represent the range and configuration of uses that could be considered ancillary to the scientific research mission for the Institute. In addition, some of the alternatives are comparable in configuration to the Refined Project Design (i.e., no development on the south mesa). A comparative analysis of these alternatives with the Refined Project Design is provided in the Preface to the Final EIR and summarized herein.

#### 8.1 ALTERNATIVE CONSIDERED BUT REJECTED

#### 8.1.1 Alternative Location

Off-site alternatives should be considered if development of another site is feasible and would reduce or avoid the significant impacts of the proposed project. Factors that need to be considered when identifying an off-site alternative include the size of the site, its location, the General Plan (or other applicable planning document) land use designation and availability of infrastructure. Development of laboratory space, support uses and additional parking facilities at an off-site location that is approximately 11 acres in size would not be a reasonable alternative to the proposed project because it would not achieve most of the basic project objectives, many of which require new facilities to be located on site. Specifically, an alternative location would not allow the new facilities to be immediately accessible from the existing buildings, thus preventing collaboration opportunities and causing decreased efficiency for Institute researchers, and would not satisfy the space needs of the existing facility.

An alternative location would require the Institute (a non-profit organization) to acquire new land or lease more off-campus space at current market rates which would not likely be located in the vicinity of the existing Institute and the University of California, San Diego (UCSD) campuses due to real estate values in the area. The non-profit Institute does not own any other land in the project area and would not have the capital to purchase property elsewhere at current market rates. Although vacancy

rates for research space in the area are currently somewhat higher than in the recent past, this situation is unlikely to continue in the long-term given the desirability of the area by research entities (e.g., proximity to UCSD researchers). In addition, the collaborative nature of the Institute's work requires proximity to UCSD and the work would be compromised and less efficient if the Institute researchers were spread among several different locations.

The University Community Plan designates several properties in the project area for scientific research use, although others have already developed all parcels of sufficient size to accommodate the Institute's proposed uses. In addition, no environmentally superior sites are available in the vicinity of the original laboratory building that would not present similar challenges and environmental constraints. For these reasons, an Alternative Location is rejected as infeasible and is not discussed any further in this section.

#### 8.2 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

#### 8.2.1 Description

Pursuant to Section 15126.6(e)(3)(B), the No Project Alternative is the "circumstances under which the project does not proceed." The No Project Alternative assumes that the Salk Institute Master Plan (proposed project) would not be adopted, the existing permits would not be amended, no expansion of the scientific space would be implemented, no new parking facilities would be built and no support facilities, such as dining facilities, administrative support uses, temporary quarters and a daycare facility, would be developed on site. The new building sites identified in the proposed project would remain in their existing condition. The eastern and northern parking lots would not be redeveloped, while the south mesa would remain undeveloped. The private driveway from Salk Institute Road would not be extended. A comprehensive landscape plan would not be implemented on site. None of the existing biological resources in the western portion of the site would be dedicated to the City for the MHPA, exotic species would not be removed and habitat management would not occur.

#### 8.2.2 Environmental Analysis

The No Project Alternative would avoid certain significant project impacts to biological resources, historical resources, transportation/circulation, noise (construction-related), and paleontological resources, but would still cause other impacts as discussed below:

Land Use – The No Project Alternative would not be consistent with the planned development intensity identified in the Community Plan. No new development would be constructed. No grading or brush management encroachment into ESL or MHPA would occur under this alternative. The No Project Alternative would be consistent with the Airport Land Use Compatibility Plan (ALUCP) for Marine Corps Air Station (MCAS) Miramar.



Visual Quality/Neighborhood Character – The No Project Alternative would not change the existing character of the site nor would it enhance views to the ocean and scenic coastal areas through the removal of temporary structures, overhead lighting standards, parked cars and other existing visual clutter. The No Project Alternative would not result in any physical encroachment into existing views of the Pacific Ocean or scenic coastal areas from Torrey Pines Scenic Drive.

Biological Resources – Project impacts to 1.83 acres of three sensitive habitats (i.e., Diegan coastal sage scrub, maritime succulent and southern mixed chaparral) caused by grading and Zone 1 brush management from the proposed project would be avoided by this alternative. Potential indirect effects on habitat from Zone 2 brush management and indirect impacts to the MHPA from construction noise, invasive species intrusion, and grading/land development associated with new development would not occur. The proposed MHPA boundary adjustment would not occur and approximately 3.2 acres of Tier I, II, and IIIA habitat would not be added to the City's preserve system. The No Project Alternative would also not increase the buffer distance between development and the vernal pools to the northwest nor would runoff into the pools be filtered since the parking lot would remain in place.

Historical Resources — The No Project Alternative would be consistent with the Secretary of the Interior's Rehabilitation Standards Nos. 2 and 9, as it would not develop the east parking lot and thus would not impact spatial associations or historical landscapes, which are contributing features of the historic Institute campus. Furthermore, the No Project Alternative would not have the potential to encounter historic-era archaeological resources associated with Camp Callan that may be present on the north mesa of the Salk campus since no grading or excavation would occur. In addition, potentially significant impacts to unknown prehistoric archaeological resources also would be avoided by this alternative. Therefore, all potentially significant historical resources impacts would be avoided under the No Project Alternative.

Traffic/Circulation – The No Project Alternative would not produce additional traffic nor would it increase demand on parking supply at the campus. By not producing traffic in the project area, the No Project Alternative would eliminate direct project impacts to the I-5/Genesee Avenue interchange in the long-term. However, the Institute's existing traffic would continue to contribute to degraded conditions at the interchange. Thus, cumulative traffic impacts would still occur.

Air Quality – Under the No Project Alternative, no new air emissions would be produced since no construction or operations would occur. The No Project Alternative would not avoid significant air quality impacts since none are expected to occur for the proposed project.

Noise- Under the No Project Alternative, no new sources of noise would be built on site nor would an increase in traffic noise along local roads occur. Construction activities would not occur on site and in

particular near the southern property boundary adjacent to off site residences. Therefore, significant construction noise impacts would be avoided by this alternative.

Hydrology/Water Quality – No significant hydrology/water quality impacts were identified for the proposed project; therefore, none would be avoided by the No Project Alternative. Potential impacts associated with drainage and water quality would not be an issue since no new construction would occur.

Geology – No significant geology impacts were identified for the proposed project; therefore, none would be avoided by the No Project Alternative. Potential impacts associated with soil erosion, seismic ground acceleration, expansive soils and oversize materials would not be an issue since no new construction would occur.

Paleontological Resources – Potential impacts to buried fossil resources would not occur since no grading or excavation into geologic formations containing a moderate to high resource potential would be needed for the No Project Alternative.

#### 8.2.3 Conclusion

The No Project Alternative would avoid or lessen all of the significant project impacts described above but would not achieve any of the basic project objectives including allowing the Institute: to implement the Kahn-Salk tri-partite design scheme; to expand its existing on-site facilities to 500,000 sf; to provide much needed scientific research space in a collaborative setting; to centralize support uses, provide a daycare facility and develop temporary housing; to underground parking areas; to enhance views of the ocean and scenic coastal resources; to expand protection for environmentally sensitive areas on site through a MHPA dedication and to provide landscape plans that would enhance the existing landscape. Although it would preserve views, it would not enhance them since the existing light standards and temporary buildings would remain under this alternative since the parking lot would not be redeveloped. For its inability to achieve the basic project objectives, the No Project Alternative is, therefore, rejected.

#### 8.3 ALTERNATIVES CONSIDERED IN DETAIL

The following alternatives are directed at avoiding or reducing significant impacts of the proposed project that are described in Section 5.0, *Environmental Analysis*, of this EIR. The alternatives evaluated in detail in this section were selected for their ability to achieve some of the basic project objectives related to maximizing the entitled square footage on site while attempting to avoid the direct significant impacts caused by the proposed project. Specifically, these alternatives were developed to avoid or reduce significant project impacts to biological resources, historical resources, and transportation/circulation. Related improvements to noise (construction-related) and paleontological

resources are also noted, as applicable. The alternatives suggest several different site plan arrangements and/or structure sizes in an attempt to avoid the physical impacts of developing certain portions of the property. An alternative is also included that attempts to prevent the offsite traffic impacts. Finally, one alternative features a site plan that was developed by project opponents and provided to the City during the EIR scoping process with a request to evaluate it in the EIR. In total, these alternatives represent the reasonable range required by Section 15126.6(a) of the State CEQA Guidelines. The Environmentally Superior Alternative is identified and discussed at the end of Section 8.0.

#### 8.3.1 Alternative Salk Community Center Building Layout

#### Description

The Alternative Salk Community Center Building Layout was the first project design proposed for development by the project applicant in 2005; due to its significant and unmitigable impacts to visual resources related to its inconsistency with land use policies and SDMC implementing regulations protecting views of the ocean and scenic coastal areas, it is now being considered an alternative to the proposed project since it would allow the project applicant to achieve the basic project objective related to on-site buildout and uses. Under this alternative, the project applicant would construct a project similar in scale and layout to the proposed project, with a few exceptions related to the layout of the Salk Community Center Building and configuration and/or location of the Torrey East Building, daycare facility, and temporary housing quarters. The location, size and layout of the other project components would be identical to those of the proposed project. Under this alternative, the Salk Community Center Building would be constructed as four separate sections (referred to as "Proposed Support Buildings" I-V on Figure 8-1, Alternative Salk Community Center Building Layout) atop the north underground parking garage. The alternative Salk Community Center Building would house administrative space, dining facilities, meeting rooms and an auditorium. In contrast to the proposed project, which would implement one, two-story auditorium section (double-height) along with two, three-story sections and two, four-story sections connected by an outdoor terrace and walkways and clustered near the western end of the north mesa, the Alternative Salk Community Center Building Layout would comprise two pairs (four total) of internally connected, two-story sections. The sections would be separated by outdoor terraces and constructed in a northwest- to southeast-oriented row paralleling Torrey Pines Scenic Drive and covering most of the north mesa. Under both the proposed project and this alternative, the terraces surrounding the Salk Community Center Building would be used for dining and social gatherings by Institute employees.

A two-level parking structure would be constructed beneath each pair of the alternative Salk Community Center Building sections, while the proposed project would construct a three-level underground parking structure to the east of the proposed Salk Community Center Building. Pedestrian and vehicular access to the alternative Salk Community Center Building and parking

structures would be provided through new pathways and Torrey Pines Scenic Drive via two new driveways; one driveway would provide similar access under the proposed project. All parking would be accommodated on site under this alternative as with the proposed project. The rooflines of the alternative Salk Community Center Building would descend from the easternmost section to the westernmost section, and would rise no more than 30 feet above finished grade (thus avoiding the need for a deviation from the maximum structure height regulations required for the proposed project). Conversely, the two westernmost sections of the proposed project Salk Community Center Building would be four stories in height but built at a lower elevation (i.e., 10 feet lower) on the site and, thus, would not appear taller than the three, three-story easternmost sections (refer to the discussion in Section 3.2.4.2 and Figure 3-3, *Project Sections*). Landscaping (trees) would be installed at regular intervals in the parkway adjacent to Torrey Pines Scenic Drive to soften the façade of the buildings.

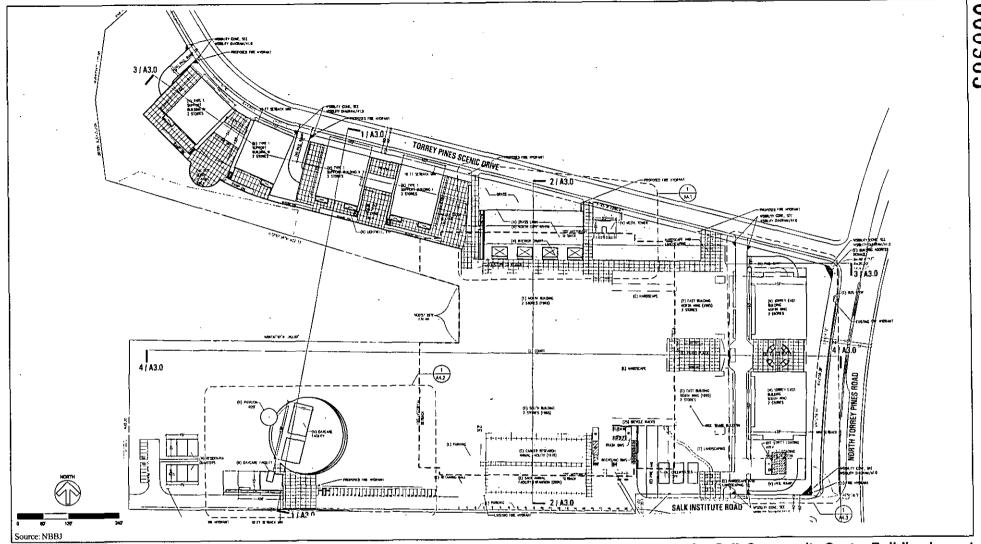
In addition to changes with the layout of the Salk Community Center Building, this alternative would feature a smaller Torrey East Building that would be constructed as two wings separated by an internal courtyard open on the east and west elevations, rather than as a larger, single structure with a transparent atrium at its core. This alternative would also feature a slightly larger daycare facility than the proposed project. The layout of the housing quarters would be oriented in a north-south pattern, rather than the east-west orientation currently proposed. Both the daycare facility and housing components of the proposed project would be shifted east of where they are presently proposed to a location on site that is higher in elevation.

With all the above changes in place, this alternative would not allow the project applicant to construct the 500,000 square feet of scientific research space because it does not take into account the square footage lost by the demolition of existing research space in temporary structures on site (i.e., 29,000 sf). Thus, the Institute would only be expanded to 471,000 sf under the Alternative Salk Community Center Building Layout.

Adoption of the Alternative Salk Community Center Building Layout would require City approval of amendments to existing permits, a Master PDP, an SDP/CDP and VTM. An MHPA boundary adjustment would be processed to mitigate impacts to biological resources and offset the loss of resources within the MHPA preserve. A deviation from the maximum structure height limitations of the underlying zone would not be requested in connection with the PDP for this alternative layout of the Salk Community Center Building.

#### Environmental Analysis

The Alternative Salk Community Center Building Layout would result in greater impacts to visual quality/neighborhood character than the proposed project due to inconsistency with land use policy protecting visual resources, but would reduce impacts to biological resources. Impacts in the areas of



Alternative Salk Community Center Building Layout

SALK INSTITUTE

Figure 8-1

historical resources, traffic/circulation, air quality, noise, geology and paleontological resources would remain the same as under the proposed project.

Land Use - Adoption of this alternative would be consistent with the scientific research use envisioned for the site in the Community Plan, but would not achieve the maximum intensity identified in the plan. It would be consistent with most of the land use policies within the General Plan, Community Plan and North City LCP. By expanding the development area on the north mesa that would be covered by the two- and three-story Salk Community Center Building sections, this alternative would obstruct more of the ocean and coastal resource views available from the travel lanes of Torrey Pines Scenic Drive. In contrast to the proposed project, the Alternative Salk Community Center Building Layout would create land use policy inconsistencies with the Urban Design Element of the Community Plan and the Coastal Overlay Zone regulations in the SDMC and related visual quality impacts because it would "wall off" views from a public roadway through the siting and massing of the Salk Community Center Building close to Torrey Pines Scenic Drive. It would also conflict with Community Plan policy language suggesting that individual buildings (or sections of buildings in this case) be staggered to maintain view corridors (see the Visual Quality/Neighborhood Character discussion Similar to the proposed project, this alternative would comply with regulations contained in the SDMC pertaining to zoning and ESL; a height deviation would not be required for this alternative. New construction on the east parking lot would impact the historic landscaping of the east parking lot and the spatial relationships that are associated with the original laboratory building. Therefore, the Alternative Salk Community Center Building Layout, like the proposed project, would be inconsistent with the Secretary of the Interior Standards and related sections of the Historical Resources Regulations of the SDMC.

Visual Quality/Neighborhood Character – The Alternative Salk Community Center Building Layout would modify the existing character of the site by constructing new buildings on the property at a nearly identical scale and intensity as the proposed project. This alternative would construct the Salk Community Center Building sections in phased pairs parallel to Torrey Pines Scenic Drive, thus effectively blocking views of the ocean and scenic coastal resources along a portion of this public road. By siting and massing the Salk Community Center Building sections close to the public road, this alternative would block or "wall off" a significant portion of the view available from Torrey Pines Scenic Drive, resulting in a significant and unmitigable impact to views protected by land use policies of the Community Plan and the Coastal Overlay Zone implementing regulations. The amount of view blockage would be greater than that of the proposed project, which would preserve a 360-foot wide view corridor along the road. Similar to the proposed project, this alternative would not block the west-facing views of the ocean and scenic coastal area resources from any of the public vantage points west of the project site, including a designated view corridor in the La Jolla Community Plan. Nonetheless, a significant and unmitigable impact to protected views would occur under this alternative.

Biological Resources - Development of the Alternative Salk Community Center Building Layout would result in significant direct impacts to sensitive upland habitats, although the acreage impacts would be slightly reduced under this alternative as compared to the proposed project and would be mitigable similar to the proposed project. Habitat removal within the existing MHPA due to grading and Zone 1 brush management would be less under this alternative as compared to the proposed project since the building sections would be placed closer to Torrey Pines Scenic Drive. With the proposed addition to the MHPA, similar to the proposed project, more acreage would be added to the MHPA than currently exists. Potentially significant indirect impacts on habitat from construction noise, invasive species introduction and grading/land development would occur under this alternative, at approximately the same levels as the proposed project. Neither the proposed project nor the Alternative Salk Community Center Building Layout would cause impacts to vernal pools, and both would respect the 100-foot buffer required around City wetlands (i.e., southern willow scrub) in accordance with the ESL regulations. Furthermore, under this alternative and the proposed project, the rock-lined vegetated swale that would be installed between the developed area and the new MHPA areas which would treat the runoff and increase slightly the size of the buffer between the development and the nearest vernal pool, thus improving the quality of the water entering the pools from the site and decreasing indirect impacts to the pools. The vernal pool buffer would be slightly larger under this alternative than with the proposed project because the Salk Community Center would be located east of its proposed location under this alternative. Neither this alternative nor the proposed project would have significant impacts to the vernal pool habitat on site.

Historical Resources – Implementation of the Alternative Salk Community Center Building Layout would result in the same impacts to the historical landscape features in the east parking lot and the same potential impacts to historic-era archaeological resources potentially buried on site as the proposed project. Development intensity on the north and east mesas under this alternative would be the same as the proposed project; thus, spatial associations and historic landscaping on the east mesa would be impacted, as would Camp Callan-era historic resources if they are found on the north mesa (no Camp Callan-era resources are expected to be found on the east mesa). Inconsistency with two of the ten Secretary of the Interior's Rehabilitation Standards for Historic Properties (regarding the onsite historic landscaping and spatial associations), and the potential disturbance of Camp Callan-era historic resources would be considered a significant impact. Views from the public right of way along North Torrey Pines Road toward the west and the historic original laboratory building would be similar to views through the internal atrium proposed for the Torrey East Building under the proposed project. Potentially significant impacts to unknown prehistoric archaeological resources could arise from construction of this alternative (and the proposed project), although no such resources are known to exist on site.

Traffic/Circulation – Although it would produce slightly less traffic than the proposed project, the Alternative Salk Community Center Building Layout would contribute trips to degraded traffic conditions on local roads and would increase demand for parking at the campus to a similar degree as

the proposed project. Due to the currently degraded condition of the I-5/Genesee Avenue interchange and predictions that LOS would remain at F during buildout conditions, significant and unmitigable project and cumulative impacts would occur under both this alternative and the proposed project. Two more parking spaces would be provided with this alternative than with the proposed project; furthermore, both this alternative and the proposed project would provide more parking spaces than is required for the planned campus buildout, thus, parking impacts would not occur.

Air Quality – Development of the Alternative Salk Community Center Building Layout would produce approximately the same amounts of air emissions during construction and operation of the new facilities as would occur under the proposed project. Pollutant emissions would not exceed the City's significance thresholds, violate any air quality standards or contribute substantially to an air quality violation under this alternative or the proposed project. Also similar to the proposed project, this alternative would not expose sensitive receptors to substantial pollutant concentrations nor would significant quantities of hazardous emissions be produced.

Noise — Under the Alternative Salk Community Center Building Layout, traffic noise and noise associated with the daycare facility would be produced at rates similar to the proposed project. Traffic noise impacts and noise impacts associated with the daycare facility would remain less than significant under both this alternative and the proposed project. Periodic construction noise would be created on site during construction of the various project components; due to the proximity of the residences to the southern property boundary, potentially significant construction noise impacts, although temporary, would result from this alternative and the proposed project.

Hydrology/Water Quality — No significant hydrology/water quality impacts are anticipated from the proposed project, and implementation of the Alternative Salk Community Center Building Layout would also avoid any such impacts. This alternative would not substantially increase the amount of impervious surfaces and runoff from the site. As with the proposed project, runoff would be handled by the existing storm drain and drainage network in the project area. Similar to the proposed project, the potential construction-related water quality impacts caused by the erosion of disturbed soils and sedimentation of downstream waters would be avoided through the implementation of Best Management Practices (BMPs) required by the City of San Diego and the Regional Water Quality Control Board (RWQCB). Potential water quality impacts associated with post-construction conditions would be precluded through compliance with the City's Stormwater Ordinance, which requires the implementation of BMPs.

Geology – No significant geology impacts are anticipated from the proposed project, and implementation of the Alternative Salk Community Center Building Layout would also avoid any such impacts. The Salk Fault is not located on site, contrary to what was originally thought (refer to Figure 5.9-2); therefore, the fault would have no significant effects on the construction of the buildings planned for this alternative or the proposed project. In addition, the slope stability analysis

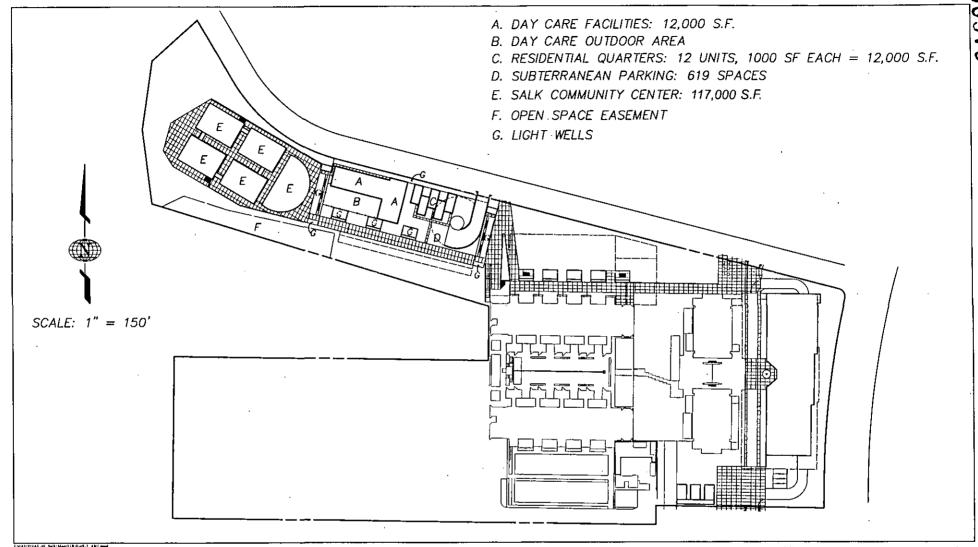
conducted for the proposed project concluded that a low potential for slope instability exists on site. Standard design, engineering and construction practices would prevent any potential impacts from seismic ground acceleration, soil erosion, expansive soils and oversize materials. Similar to the proposed project, the Alternative Salk Community Center Building Layout would not result in significant geology impacts.

Paleontological Resources – Potentially significant impacts to buried fossil resources would be the same as under the proposed project since excavation to install underground parking would also be conducted under this alternative. Similar to the proposed project, significant paleontological impacts are anticipated.

#### Conclusion

Due to the overlapping layout of buildings along Torrey Pines Scenic Drive, the Alternative Salk Community Center Building Layout would create significant and unmitigable impacts to visual quality/neighborhood character that would not exist for the proposed project. Impacts to biological resources would be slightly less than the proposed project but still significant in nature due to construction on the south mesa. Impacts to historical resources, traffic/circulation, air quality, noise, hydrology/water quality, geology and paleontological resources would be similar to those anticipated for the proposed project. Although the Alternative Salk Community Center Building Layout would be consistent with most of the basic objectives of the proposed project, it would not satisfy the Institute's goal of building up to 500,000 sf on site (as anticipated in the Community Plan) and would be inconsistent with the tri-partite arrangement of structures envisioned in the 1961 Master Plan, it would create significant and unmitigable project impacts to visual quality/neighborhood resources from non-compliance with land use policies and SDMC implementing regulations governing the protection of visual resources that would not be expected for the proposed project, and significant and unmitigable project and cumulative impacts to traffic/circulation at the I-5/Genesee Avenue interchange would not be reduced or avoided.

As noted in the Preface to the Final EIR, although the Alternative Salk Community Center Building Layout would be consistent with many of the project objectives for the Refined Project Design, it would incorporate daycare and housing uses that would cause greater impacts to biological resources, worsen construction noise impacts, and eliminate (and not enhance) the public view corridor across the north mesa to the ocean and scenic coastal resources nearby, resulting in a new significant and unmitigable impact. This alternative would not avoid significant and unmitigable traffic impacts (as noted above).



**North Mesa Intensified Development Alternative** 

SALK INSTITUTE

Figure 8-2

#### 8.3.2 North Mesa Intensified Development Alternative

#### Description

Under this alternative, the project applicant would modify the proposed project design and eliminate development on the southern mesa by shifting the daycare facility and housing units to a location atop the parking structure on the north mesa. The purpose of this alternative would be to minimize direct project impacts to sensitive biological (upland) habitat areas. Similar to the proposed project, no steep slopes or floodplains would be impacted by this alternative. No changes in the location of the Salk Community Center Building or the parking structure would occur to accommodate the shifted uses (refer to Figure 8-2, North Mesa Intensified Development Alternative). Similar to the proposed project, the daycare facility would be one-story, while the housing would comprise two- to three-story structures under this alternative. The south mesa would remain undeveloped under this alternative. The existing pavement area on the north mesa would be removed, and a portion of it would be recontoured and revegetated with native species similar to the proposed project. This alternative would allow for the maximum buildout of 500,000 sf. Development of this alternative would require City approval of all the same permits as the proposed project; however, the MHPA boundary adjustment would be much smaller in size and would only involve land on the north mesa since less biological habitat mitigation would be needed, as described below under Biological Resources.

By relocating development from the south mesa to the north mesa, the North Mesa Intensified Development Alternative would require the project applicant to construct a partial fourth underground parking level (to accommodate parking for the daycare facility and housing) and to upgrade the parking structure itself to accommodate the structural loads of the proposed buildings. In addition, utilities for the daycare facility and housing quarters would have to be branched across the underground parking structure, which would require deeper floor heights and excavations to implement. Development of the daycare facility and housing on the roof-top of the parking structure would also eliminate the park-like landscaped open space envisioned for the view corridor on the north mesa that would be preserved and enhanced by the proposed project. Otherwise, the Torrey East Building, north lawn core facility and greenhouses would be constructed as described for the proposed project. The parking structure associated with this alternative would be expanded to accommodate up to 619 spaces (or 42 more than the structure for the proposed project); thus, all parking would still occur on site under this alternative.

The daycare facility location and design under the North Mesa Intensified Development Alternative would be less desirable than the proposed project because it would: 1) place the facility at an exterior location along a public road, which would compromise its security and not take advantage of the unique educational opportunities afforded by the proposed natural setting, 2) place the facility atop a parking garage that would be open 24 hours each day of the week and expose the children to noise, emissions and other undesirable elements, 3) omit the off-street, drop-off area that is required planned

for the daycare facility, 4) reduce by half the size of the play yard to the minimum required by the state (i.e., 6,000 sf), along with making the play yard a less attractive environment for children (i.e., comprised of less landscaping and more concrete), 5) not allow the daycare facility to use its landscaped retaining wall for enhanced environmental educational purposes, and 6) relocate staff and drop-off parking to the underground parking structure, resulting in a less safe and less convenient drop-off procedure wherein parents would be required to walk through the parking structure with children to access the facility. In addition, this alternative would place the daycare facility between the Salk Community Center Building and scientific buildings, causing a constant flow of pedestrian traffic past the facility.

The alternative housing location would occur in a less aesthetically appealing site atop the parking structure, where it would not be separated from the scientific research uses on campus nor integrated with the natural landscape. Surface parking adjacent to the proposed housing quarters would also be shifted to the underground parking structure, making it less convenient than under the proposed project configuration. In addition, the landscape buffer around the units would be substantially smaller than required by the SDMC and no accessible pathways or tree buffers would be provided amongst the units. Similar to the daycare facility, the housing would be exposed to 24-hour a day parking garage effects and a constant flow of pedestrian traffic between the Salk Community Center Building and the scientific buildings on campus. Traffic, lighting and pedestrian activity could increase in the future along Torrey Pines Scenic Drive should UCSD decide to construct an academic facility across from the Institute's property. Those conditions would further degrade the quality, aesthetics and privacy of the housing quarters, making them less aesthetically appealing to visiting and new scientists.

In order to construct the daycare facility or housing quarters, project phasing would change such that the Institute would have to fund and construct the entire underground parking garage before being able to construct those uses, even though their parking needs (in combination with the displaced surface parking) would be much smaller than the supply within the parking structure. This approach to phasing would substantially increase the front-end costs of implementing the daycare facility and housing quarters, possibly making them infeasible to construct prior to the Salk Community Center Building and diverting much-needed research funds from the Institute's core scientific mission.

In addition, the North Mesa Intensified Development Alternative would not implement the phased, tri-partite design scheme envisioned for the property by Louis Kahn wherein the scientific research space, meeting/dining space and housing needs of the Institute are met in three distinct geographic locations on the Institute's campus. As described in Section 3.0, *Project Description*, of this report, the tri-partite scheme is recognized in the design community as an important element of realizing the long-term plans of the original Institute architect.

#### **Environmental Analysis**

The North Mesa Intensified Development Alternative would result in much greater impacts to visual quality/neighborhood character than the proposed project related to non-compliance with land use policies and SDMC implementing regulations protecting views of the ocean and scenic coastal resources but would reduce direct project impacts to biological resources (upland habitat) to less than significant levels as discussed below. Impacts in the areas of air quality, hydrology/water quality, geology, noise and paleontology would remain the same as or slightly less than anticipated with the proposed project as discussed below. Impacts to historical resources caused by changes in spatial relationships would be far greater than the proposed project.

Land Use - Adoption of this alternative would be consistent with the scientific research use envisioned for the property in the Community Plan. It would also be consistent with most of the land use policies within the General Plan, Community Plan and North City LCP. By clustering much of the proposed uses on to the north mesa, however, this alternative would shift development toward the public road, which would block more of the views of the ocean and scenic coastal areas available from the travel lanes of Torrey Pines Scenic Drive as described below under Visual Quality/Neighborhood Character. Unlike the proposed project, the North Mesa Intensified Development Alternative would create land use policy inconsistencies with the Urban Design Element of the Community Plan and Coastal Overlay Zone regulations in the SDMC, which would trigger significant and unmitigable impacts, related to visual quality. Specifically, this alternative would wall off views from a public roadway through the siting and massing of the Salk Community Center Building, housing and daycare facility close to the public street. It would also conflict with Community Plan policy language in the Urban Design Element suggesting that individual buildings be staggered to maintain view corridors. A building height deviation would still be required for this alternative. Table 5.1-1 of this report provides the specific policy language that this alternative would conflict with (refer to pages 5.1-53 through 5.1-55 of the table). Under this alternative, the close proximity of the land uses (i.e., daycare and housing atop a parking garage and located between the scientific research laboratories and the support building) would result in indirect or secondary environmental impacts, such as the exposure of sensitive land uses to excess traffic, noise or air emissions, that would not exist for the proposed project.

The North Mesa Intensified Development Alternative would minimize, but not avoid, encroachment into sensitive biological resources. Most of the grading and development would occur on developed portions of the site, specifically the north and east parking lots and north lawn. No steep hillsides would be impacted similar to the proposed project. Zone 1 brush management would be in the same location as the proposed project, thus impacting the same sensitive biological resources on the north mesa that would be impacted by the proposed project. In terms of consistency with the policies of the MSCP, brush management Zone 2 around this alternative would still encroach into the existing MHPA and inconsistencies with the MSCP Subarea Plan Land Use Adjacency Guidelines would be

expected (as described below under *Biological Resources*). A much smaller MHPA boundary adjustment would be processed for this alternative. Similar to the proposed project, this alternative would comply with the MCAS Miramar Airport Land Use Compatibility Plan (ALUCP) regarding both noise and safety.

Visual Quality/Neighborhood Character - The North Mesa Intensified Development Alternative would modify the existing character of the site by constructing new buildings on the property. By locating the daycare facility and housing units on the north mesa, the proposed structures would place the structures in a pattern which would overlap with the Salk Community Center Building and effectively block existing views of the ocean and scenic coastal areas from Torrey Pines Scenic Drive. This alternative would block or "wall off" a significant portion of the view available from Torrey Pines Scenic Drive by massing the structures close to the public road and would result in a significant and unmitigable impact to views due to inconsistencies with the land use policies of the Community Plan and Coastal Overlay Zone implementing regulations protecting those views. The amount of view blockage caused by the North Mesa Intensified Development Alternative would be substantial compared to the proposed project, which would preserve views of the ocean and scenic coastal areas from the road through the implementation of a park-like, landscaped view corridor. Similar to the proposed project, this alternative would not block the west-facing views of the ocean and scenic coastal areas from any of the public vantage points west of the project site, including a designated view corridor in the La Jolla Community Plan. Nonetheless, a significant and unmitigable impact to protected views would occur under the North Mesa Intensified Development Alternative, which would not otherwise exist for the proposed project.

Biological Resources - Grading associated with the North Mesa Intensified Development Alternative would not disturb sensitive biological resources on the south mesa. Because of the minor amount of grading and Zone 1 brush management on the north mesa associated with the Salk Community Center Building and underground parking structure, direct impacts to sensitive biological resources (upland habitats), including Diegan coastal sage scrub and maritime succulent scrub, would be reduced to less than 0.1 acre (i.e., below the City significance thresholds); thus, significant direct impacts to sensitive upland habitat would be avoided but significant indirect impacts on the MHPA would still occur. Project impacts to southern mixed chaparral would also be avoided by this alternative. Project impacts to a portion of a coastal California gnatcatcher territory outside the MHPA would be avoided. Potentially significant impacts to raptor habitat through the removal of eucalyptus trees in the developed portion of the site would be similar to that of the proposed project. Potentially significant indirect effects on habitat from grading/development and invasive species intrusion and on sensitive wildlife in the MHPA from construction noise would be less than those expected for the proposed project due to the elimination of development on the south mesa, but still potentially significant. The amount of habitat removed from the MHPA would be the same as the proposed project; however, the configuration of the proposed MHPA boundary adjustment would be substantially different under this alternative since it would only involve land on the north mesa due to

the elimination of habitat mitigation requirements (i.e., impacts to less than 0.1 acre do not require mitigation under the SDMC Biological Guidelines). The vernal pools would not be placed in the MHPA under this alternative because the size of the boundary adjustment would be much smaller. Without the MHPA boundary adjustment around the northwest mesa, habitat management including installation of a barrier along the sidewalk, would not be implemented for the vernal pool area. Consequently, increased protection of sensitive upland habitat on the south mesa and the vernal pools on the north mesa would not occur under this alternative.

Historical Resources - Implementation of the North Mesa Intensified Development Alternative would result in similar impacts to the historical landscape features in the east parking lot and the same potential impacts to historic-era and unknown prehistoric archaeological resources potentially buried on site as the proposed project. However, development intensity on the north and east mesas would be much greater than the proposed project under this alternative; thus spatial associations on the east and north mesas would be impacted, as could subsurface structural remains of Camp Callan on the north mesa. The Secretary of Interior Standards (see Table 5.4-1 in this report) note that all new construction should be distanced and differentiated from the historic resources on site. The North Mesa Intensified Development Alternative would not protect the integrity of the historic laboratory building because the buffer between new and old structures observed by the proposed project would not be respected. New construction would be placed much closer to the existing historic architecture than under the proposed project. Thus, by eliminating development on the south mesa and placing it on the north mesa, the North Mesa Intensified Development Alternative would further impact spatial relationships with the existing historic resources on site, and significant impacts to historic resources would be far greater for this alternative as compared to the proposed project. Potentially significant impacts to unknown (buried) historic and pre-historic archaeological resources would be slightly less than the proposed project due to the elimination of grading on the south mesa.

Traffic/Circulation – The North Mesa Intensified Development Alternative would generate traffic and would increase demand for parking at the Institute's campus. This alternative would produce a similar amount of traffic, and result in the same significant and unmitigable traffic impacts, as the proposed project. Relocating the daycare facility and housing to the north mesa would shift some trips destined for the south mesa (via Salk Institute Road) to Torrey Pines Scenic Drive on the north mesa. This redistribution of vehicle trips would not result in substantial new traffic impacts since no additional trips are assigned to the daycare facility and the amount of additional trips assigned to the housing would be minimal. Significant and unmitigable project and cumulative impacts to the I-5/Genesee Avenue interchange would not be avoided by this alternative due to the currently degraded condition of the interchange and future predictions that level of service would continue to be degraded during buildout conditions.

Air Quality - Implementation of the North Mesa Intensified Development Alternative would not avoid any significant air quality impacts since none are anticipated with the proposed project.

Development of the North Mesa Intensified Development Alternative would produce air emissions during construction and operation of the new facilities. Similar to the proposed project, however, these pollutant emissions would not exceed the City's significance thresholds, violate any air quality standards or contribute substantially to an air quality violation. This alternative would not expose sensitive receptors to substantial pollutant concentrations at intersections nor would significant quantities of hazardous emissions be produced. As with the proposed project, however, less than significant air quality impacts would arise from this alternative.

Noise – Under the North Mesa Intensified Development Alternative, traffic noise and noise from the daycare facility playground would be produced at rates similar to those of the proposed project. Significant noise impacts would not be avoided (by moving the daycare facility away from the residences) since noise levels from the facility would not exceed City noise standards. Traffic noise impacts would remain less than significant similar to the proposed project. Significant temporary impacts to adjacent residences from construction noise at the daycare and housings sites would be reduced by this alternative since no new structures would be built near the residences along the southern property boundary. The impacts would, however, not be eliminated by this alternative because construction of the Salk Community Center Building would result in greater temporary noise impacts on the proposed housing and daycare facility. As such, temporary noise impacts would be significant and generally similar to those of the proposed project, but relocated from the south mesa to the north mesa under this alternative.

Hydrology/Water Quality – Implementation of the North Mesa Intensified Development Alternative would not avoid any significant hydrology/water quality impacts since none are anticipated with the proposed project. This alternative would not substantially reduce the amount of impervious surfaces and runoff from the site. As with the proposed project, runoff would be handled by the existing storm drain and drainage network in the project area. Similar to the proposed project, the potential construction-related water quality impacts caused by the erosion of disturbed soils and sedimentation of downstream waters would be avoided through the implementation of BMPs required by the City and RWQCB. Operational impacts to water quality caused by minor increases in urban runoff would be lessened by this alternative since the south mesa would remain undeveloped. Similar to the proposed project, long-term water quality impacts would be precluded by compliance with the City Stormwater regulations.

Geology – Implementation of the North Mesa Intensified Development Alternative would not avoid any significant geology impacts since none are anticipated with the proposed project. The Salk Fault is not located on site, was previously thought (see Figure 5.9-2); therefore, the fault would have no significant effect on construction of the daycare and housing components of this alternative. In addition, the slope stability analysis conducted for the proposed project concluded that a low potential for slope instability exists on site. Standard design, engineering and construction practices would prevent any potential impacts from seismic ground acceleration, soil erosion, expansive soils and

oversize materials. Similar to the proposed project, the North Mesa Intensified Development Alternative would result in no significant geology impacts.

Paleontological Resources — Potentially significant impacts to buried fossil resources would be somewhat less than the proposed project since no grading would occur on the south mesa. Potentially significant impacts would still arise due to excavation to install underground parking on the east and north mesas. The increased depth of excavation due to the larger underground parking structure may increase the paleontological resource impacts anticipated under this alternative due to the moderate to high sensitivity of the formations on site.

#### Conclusion

Relocation of the daycare facility and housing to be constructed atop the underground parking structure along Torrey Pines Scenic Drive would create a new significant and unmitigable project impact to visual quality/neighborhood character (related to the inconsistency with land use policies and SDMC implementing regulations intended to preserve views of the ocean and scenic coastal areas from public roadways) that would not exist for the proposed project. Significant and unmitigable traffic/circulation impacts would be the same as the proposed project at the I-5/Genesee Avenue intersection. Significant impacts to historic resources (related to spatial relationships) would be greater under this alternative because it would not respect the buffer around the existing historic architecture that the proposed project does. Potentially significant impacts to unknown (buried) historic and pre-historic archaeological resources would be slightly less than the proposed project. Direct impacts to biological resources would be less than the proposed project, but still significant for indirect impacts on the MHPA. Significant impacts from temporary construction noise on adjacent residences would be avoided by this alternative, although significant impacts to the daycare and housing related to construction noise from the Salk Community Center would arise. Impacts to air quality, hydrology/water quality, and geology would be similar to those anticipated for the proposed project. Significant impacts to paleontological resources could be worsened due to the increased excavation into formational materials caused by the additional parking garage level required by this alternative. Finally, the potential for a land use conflict would arise since sensitive land uses (i.e., daycare facility and housing) would be exposed to indirect or secondary environmental impacts caused by their proximity to the parking garage, scientific research facilities and public roadway.

The North Mesa Intensified Development Alternative would not be consistent with the scope, planning and architectural theme (or the tri-partite scheme) envisioned for the site by Jonas Salk and Louis Kahn, would result in inappropriate land use adjacencies on the north mesa, would not place the daycare facility in a location that is internally or externally secure, would substantially compromise the design scheme and aesthetics of the daycare facility and temporary housing by removing them from their proposed natural setting, would eliminate the public view corridor that is preserved and enhanced by the proposed project and would not produce a project that enhances the existing

landscape and structures. In addition, this alternative would require the Institute to expend substantially more funds sooner in their development phases than currently anticipated since the underground parking garage would be larger and have to be constructed in association with the daycare facility and housing quarters. This alternative would create a new significant and unmitigable project impact due to inconsistencies with land use policy and SDMC implementing regulations, new significant (but mitigable) impacts to daycare and housing facilities related to construction of the Salk Community Center Building, would not avoid any of the significant project impacts, and would not achieve many of the basic project objectives and is, therefore, rejected.

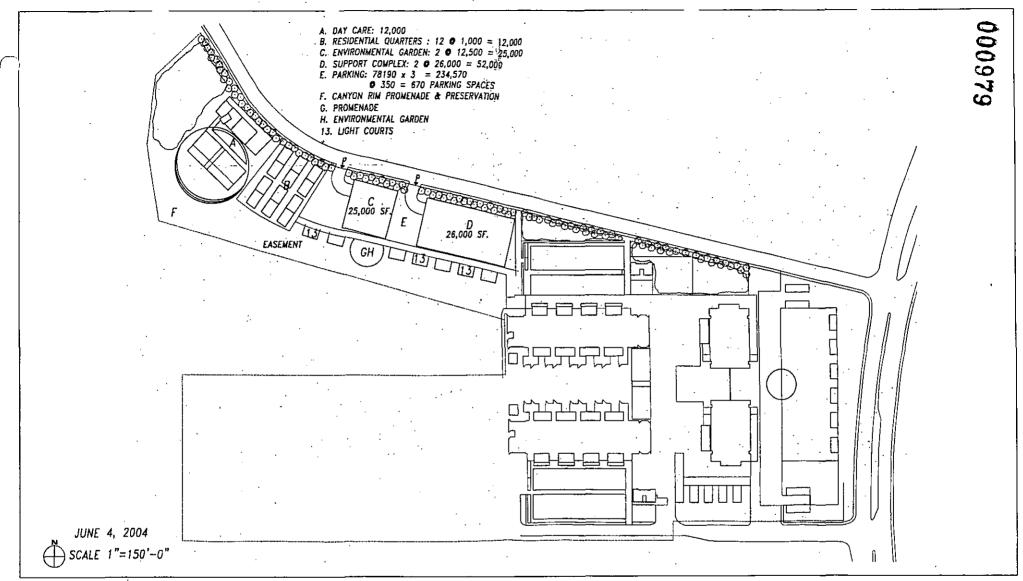
With regard to the objectives of the Refined Project Design, the North Mesa Intensified Development Alternative would not be consistent with the scope and general intent of the planning and architectural theme envisioned for the site, would result in inappropriate land use adjacencies on the north mesa, would eliminate the public view corridor across the north mesa and would not enhance existing landscape and structures. Although this alternative would result in less than significant impacts to biological habitat, it would create a new significant and unmitigable visual quality impact, would not avoid the significant and unmitigable traffic impacts and would not achieve many of the basic project objectives.

#### 8.3.3 Neighborhood Proposed Alternative

#### Description

This project alternative is addressed in this report because neighbors opposed to the proposed project submitted an alternative design to the City of San Diego for consideration. Under this alternative, the project applicant would construct the design alternative requested by the residential neighbors to the south of the project during the EIR scoping process (referred to therein as the "Wong" Alternative). The primary purpose of this alternative is to eliminate development of the southern mesa, shift development to the parking lot on the north mesa away from areas visible to the private residences to the south, and avoid perceived effects on land use compatibility and sensitive habitat. To accomplish these goals, this alternative would shift the proposed daycare facility and housing units from the south mesa to the western end of the north mesa and re-arrange and eliminate a portion of the proposed Salk Community Center Building to make space for the shifted uses (refer to Figure 8-3, Neighborhood Proposed Alternative). No development would be constructed on the south mesa under the Neighborhood Proposed Alternative.

As compared to the North Mesa Intensified Development Alternative, analyzed above, this alternative would reduce the size of the Salk Community Center Building, increase the size of the Torrey East Building and substantially modify the arrangement of uses on the north mesa as compared to the proposed project design. The Neighborhood Proposed Alternative would shift the Salk Community Center to the east end of the parking lot and place the daycare facility and housing on the west end of



**Neighborhood Proposed Alternative** 

SALK INSTITUTE

Figure 8-3

the parking lot. This alternative would reduce the total building area achieved by the North Mesa Intensified Development Alternative and the proposed project by approximately 34,000 sf.

By relocating the uses proposed on the south mesa to the north mesa, the Neighborhood Proposed Alternative would eliminate approximately 40,000 sf of support space from the Salk Community Center Building by reducing the number of stories to two and allocating less area to the structure. The Salk Community Center Building would be placed near the eastern end of the parking lot at a higher elevation on the site. Conversely, the one-story daycare facility and two- to three-story temporary housing quarters would be located at a lower elevation on the west end of the parking lot. The area planned for housing would be larger than proposed because the units would be reduced in height to one-story structures. As with the proposed project, the Torrey East Building would be two stories high and sited above a new underground parking structure. The footprint for the building would not step back from North Torrey Pines Road to provide a landscaped buffer along the eastern façade as proposed, would not feature a transparent central atrium or break in the building to allow visual connection between the historic courtyard and the public roadway and, therefore, would be approximately 6,000 sf larger than the proposed building. The tri-level underground parking structure on the north mesa associated with this alternative would be similar in location, but larger in size when compared to the proposed project. The alternative parking structure would accommodate 670 spaces (i.e., 66 more spaces than the proposed parking garage); thus, all parking would still be accommodated on site under this alternative. The Neighborhood Proposed Alternative shows a twostory environmental garden near the center of the north mesa atop the currently proposed underground parking structure. A promenade is also shown on the plans for this alternative south of the environmental garden and Salk Community Center Building. This alternative would reduce the amount of support uses and increase slightly the amount of scientific research uses developed on site resulting in a net reduction of approximately 34,000 sf and a maximum buildout of 465,000 sf.

The Neighborhood Proposed Alternative would place the daycare facility at an exterior location along a public road, which would not satisfy the project objective of placing the facility in a secure location. The alternative daycare location would also be less desirable for the same reasons listed under the North Mesa Intensified Development Alternative, including its lack of security for the children, the omission of an at-grade drop-off area, the lack of a natural setting, and inappropriate land use adjacencies.

All of the existing pavement area in the parking lot would be developed under this alternative and none of it would be removed, recontoured or revegerated with native species for use as a drainage swale and buffer to the MHPA and vernal pools (as it would be with the proposed project). Zone 1 brush management on the north mesa would extend farther into native habitat (encompassing a portion of the vernal pool area) than under the proposed project, resulting in additional direct impacts to biological resources on the north mesa that would not occur under the proposed project. The alternative housing location would not be separated from the scientific research uses or integrated into the natural landscape, would have compromised security and privacy issues due to land uses adjacencies, would not feature the

necessary landscape buffers, among other issues of the north mesa that are also mentioned for the North Mesa Intensified Development Alternative.

In addition, the Neighborhood Proposed Alternative would not implement the phased, tri-partite design scheme envisioned for the property by Louis Kahn wherein the scientific research space, meeting/dining space and housing needs of the facility are met in three distinct geographic locations on the Institute's campus. As noted in Section 3.0, *Project Description*, of this report, the tri-partite scheme is recognized in the design community as an important element of the long-term plans for the site.

#### **Environmental Analysis**

The Neighborhood Proposed Alternative would result in significant and unmitigable impacts to visual quality/neighborhood character (unlike the proposed project), but would reduce project impacts to biological resources (only on the south mesa), traffic/circulation, and noise as discussed below. Impacts in the areas of air quality, hydrology/water quality, geology and paleontology would remain the same as or slightly less than anticipated with the proposed project as discussed below. In contrast, the impact of this alternative on historic resources would be greater than that of the proposed project. A detailed description of the environmental impacts of this alternative, as compared to the proposed project, is provided below.

Land Use - Adoption of this alternative would be consistent with the scientific research use envisioned for the property in the Community Plan. It would also be consistent with most of the land use policies within the General Plan, Community Plan and North City LCP. By clustering most of the development on the north mesa, however, this alternative would shift development away from private views and toward the public road, which would block more of the public views of the ocean and scenic coastal areas available from the travel lanes of Torrey Pines Scenic Drive. In contrast to the proposed project, the Neighborhood Proposed Alternative would create significant and unmitigable visual quality impacts related to land use policy inconsistencies with the Urban Design Element of the Community Plan and Coastal Overlay Zone implementing regulations in the SDMC and because it would wall off views from a public roadway through the siting and massing of the all proposed facilities, such as the environmental garden, Salk Community Center Building, housing and daycare facility, close to the public street. It would also conflict with Community Plan Urban Design Element policy language suggesting that individual buildings be staggered to maintain view corridors. Table 5.1-1 of this report provides the specific policy language that this alternative would conflict with (see pages 5.1-53 through 55 of the table). Under this alternative, the close proximity of the land uses (i.e., daycare facility and housing adjacent a parking garage and located between the scientific research laboratories and the support building) would result in indirect or secondary environmental impacts, such as the exposure of sensitive land uses to excess traffic, noise or air emissions, that would not exist for the proposed project.

The Neighborhood Proposed Alternative would minimize, but not avoid, encroachment into sensitive biological resources protected by the ESL regulations. All grading and development would occur on developed portions of the site, specifically the north and east parking lots and north lawn. No steep hillsides would be impacted. Zone 1 brush management would extend well beyond the developed portion of the site into sensitive biological resources on the north mesa, including the vernal pool habitat that would otherwise not be impacted by the proposed project. In terms of consistency with the policies of the MSCP, brush management Zones 1 and 2 around this alternative would encroach into the existing and proposed MHPA and inconsistencies with the MSCP Subarea Plan Land Use Adjacency Guidelines related to indirect impacts would be expected (as described below under Biological Resources). An MHPA boundary adjustment could be processed to mitigate impacts to biological resources and offset the loss of resources within the preserve. The size of the boundary adjustment could be smaller than the adjustment associated with the proposed project because the biological mitigation requirements would be less.

Similar to the proposed project, this alternative would comply with the MCAS Miramar ALUCP regarding both noise and safety. A building height deviation would not be required for this alternative.

Visual Quality/Neighborhood Character - The Neighborhood Proposed Alternative would modify the existing character of the site by constructing new buildings on the property. By shifting the Salk Community Center to a higher elevation at the eastern end of the parking lot and locating the daycare facility and housing units on the western end of the north mesa, the proposed structures would shift development away from private property and place the structures next to a public road in a pattern which would overlap and effectively block public views of the ocean and scenic coastal areas from Torrey Pines Scenic Drive. This alternative would block or "wall off" a significant portion of the view available from Torrey Pines Scenic Drive by massing the structures close to the public road and would result in a significant and unmitigable impact to views and the land use policies of the Community Plan and Coastal Overlay Zone implementing regulations protecting those views. The amount of view blockage would be much greater than that of the proposed project, which would preserve and enhance ocean and scenic coastal area views from the public road by placing the Salk Community Center at a lower elevation and creating a landscaped view corridor across the top of the parking garage. Similar to the proposed project, this alternative would not block the west-facing views of the ocean and scenic coastal areas from any of the public vantage points west of the project site, including a designated view corridor in the La Jolla Community Plan. Nonetheless, a significant and unmitigable impact to protected views would occur which would not otherwise exist for the proposed project.

Biological Resources - Grading associated with the Neighborhood Proposed Alternative would not disturb sensitive biological resources; however, because of Zone 1 brush management, significant impacts to sensitive habitats, including Diegan coastal sage scrub and maritime succulent scrub, would not be avoided. As compared to the proposed project, this alternative would cause Zone 1

brush management impacts to vernal pool habitat and a gnatcatcher territory on the north mesa. The amount of habitat shifted into the MHPA would be less than proposed and configured differently due to the reduction in biological mitigation under this alternative. Habitat on the south mesa and the vernal pools on the north mesa would not likely be placed in MHPA under this alternative. No habitat management would be implemented for those resources.

Potential indirect effects on habitat from Zone 2 brush management and indirect impacts to gnatcatchers in the MHPA from construction noise associated with new development would be similar to those expected for the proposed project. Potentially significant impacts to raptor habitat in the developed portion of the site would be similar to that of the proposed project. Potential impacts due to human intrusion and drainage toxins in the MHPA would likely be greater than the proposed project since there would be no room to construct a vegetated, rock-lined swale under this alternative design. The Neighborhood Proposed Alternative would not increase the buffer distance between existing development and the vernal pools to the northwest. Runoff into the pools could substantially decrease upon development of this alternative upstream of the pools. The quality of water in the pools could improve since urban runoff from the parking lot would be diverted away, although any runoff would not be filtered by a vegetated swale as with the proposed project. Potential indirect impacts caused by grading/development would be less than for the proposed project due to the reduction in grading of natural areas.

Historical Resources - Implementation of the Neighborhood Proposed Alternative would result in the same impacts to the historical landscape features in the east parking lot and the same potential impacts to historic-era, yet unknown, prehistoric archaeological resources potentially buried on site as the proposed project. However, development intensity on the north mesa would be much greater than the proposed project under this alternative. Placing most of the new development on the north parking lot would be inconsistent with the historic tri-partite scheme and would affect spatial relationships on the project site more than under the proposed project since a buffer around the historic architecture would not be observed. Similar to the North Mesa Intensified Development Alternative, this alternative would be inconsistent with the Secretary of the Interior Standards that note that all new construction should be distanced and differentiated from the historic resources. The Neighborhood Proposed Alternative would not protect the integrity of the historic laboratory building because the buffer between new and old structures would be insufficient. In addition, the Torrey East Building on the east mesa shown in Figure 8-3 would not feature an atrium core or central courtyard; thus spatial associations on the east mesa caused by loss of the historic parking lot and its landscaping (i.e., Chinese Fringe trees) and the lack of visual connection between views from the public road and the historic courtyard would be significantly impacted by this alternative more than under the proposed project. Subsurface structural remains of Camp Callan on the north mesa would be impacted by this alternative, as well as the proposed project. Unknown prehistoric archaeological resources could potentially occur at any location on the project site, therefore related impacts are possible under

this alternative. Thus, eliminating development on the south mesa would worsen significant project impacts to historical resources beyond levels anticipated for the proposed project. .

Traffic/Circulation — The Neighborhood Proposed Alternative would generate traffic and would increase demand for parking at the campus. This alternative would produce approximately 5 percent less traffic (based on the reduction in square footage) than the proposed project. Despite this reduction, significant project and cumulative impacts to the I-5/Genesee Avenue interchange would not be avoided by this alternative due to the currently degraded condition of the interchange and future predictions that level of service would continue to be F during buildout conditions.

Air Quality – Development of the Neighborhood Proposed Alternative would produce air emissions during construction and operation of the new facilities. Pollutant emissions would not exceed the City's significance thresholds, violate any air quality standards or contribute substantially to an air quality violation since the alternative would involve less construction and produce less traffic than the proposed project. Similar to the proposed project, this alternative would not expose sensitive receptors to substantial pollutant concentrations nor would significant quantities of hazardous emissions be produced. As with the proposed project, less than significant air quality impacts would arise from this alternative.

Noise – Under the Neighborhood Proposed Alternative, traffic noise and noise from the daycare facility playground would be produced at rates similar to those of the proposed project. Significant noise impacts would not be avoided by moving the daycare facility away from the residences since noise levels from the facility would not exceed City noise standards. Traffic noise impacts would remain less than significant, since less traffic would be produced by this alternative than by the proposed project and insignificant traffic noise impacts would result from the proposed project. Significant impacts from temporary construction noise would be reduced by this alternative since no new structures would be built near the residences along the southern property boundary; however, construction noise impacts would be relocated from the private residences to the daycare facility and housing and would be worse under this alternative than the proposed project.

Hydrology/Water Quality – Implementation of the Neighborhood Proposed Alternative would not result in any significant hydrology/water quality impacts since none are anticipated with the proposed project. This alternative would not substantially increase the amount of impervious surfaces and runoff from the site. As with the proposed project, runoff would be handled by the existing storm drain and drainage network in the project area. Operational impacts to water quality caused by minor increases in urban runoff would be precluded through project compliance with the City Stormwater regulations. Similar to the proposed project, the potential construction-related water quality impacts caused by the erosion of disturbed soils and sedimentation of downstream waters would also be avoided through the implementation of BMPs required by the City and RWQCB.

Geology – Implementation of the Neighborhood Proposed Alternative would not result in any significant geology impacts since none are anticipated with the proposed project. The Salk Fault is not located on site, as was previously thought (see Figure 5.9-2); therefore, the fault would have no significant effect on construction of the daycare and housing components of this alternative. In addition, the slope stability analysis conducted for the proposed project concluded that a low potential for slope instability exists on site. Standard design, engineering and construction practices would prevent any potential impacts from seismic ground acceleration, soil erosion, expansive soils and oversize materials. Similar to the proposed project, the Neighborhood Proposed Alternative would result in no significant geology impacts.

Paleontological Resources – Potentially significant impacts to buried fossil resources would be the same as the proposed project since excavation to install underground parking would be implemented under this alternative. Similar to the proposed project, significant impacts are anticipated.

#### Conclusion

The construction of multiple buildings along Torrey Pines Scenic Drive under the Neighborhood Proposed Alternative would create a new significant and unmitigable project impact to visual quality/neighborhood character related to the preservation of views protected by applicable land use polices and implementing regulations that would not exist for the proposed project. Traffic/circulation impacts would be less than the proposed project, but would remain significant and unmitigable at the I-5/Genesee Avenue interchange. Direct impacts to biological resources would be less than the proposed project, but still significant. Indirect impacts due to human intrusion and toxins would be worse than the proposed project. Indirect impacts to breeding gnatcatchers and raptors would be similar to the proposed project. Significant impacts due to temporary construction noise effects on nearby residences would be reduced by this alternative, but shifted to the north mesa where the daycare facility and housing quarters would be constructed. Impacts to air quality, hydrology/water quality, geology and paleontology would be similar to those anticipated for the proposed project. Impacts to historic resources (spatial relationships) would be greater than the proposed project due to the intensification of development on the north and east mesas. Potentially significant impacts to unknown (buried) historic and pre-historic archaeological resources would be slightly less than the proposed project. Finally, the Neighborhood Proposed Alternative would potentially create a land use conflict since sensitive land uses (i.e., daycare facility and housing) would be exposed to indirect or secondary environmental impacts caused by their proximity to the parking garage, public roadway and scientific research facilities.

The Neighborhood Proposed Alternative would not be consistent with the scope, planning and architectural theme (or tri-partite scheme) envisioned for the site by Jonas Salk and Louis Kahn, would not allow the Institute to reach its 500,000 sf capacity identified in the Community Plan, would

inappropriately mix the proposed land uses on the north mesa, would not place the daycare facility in a location that is internally or externally secure, would substantially compromise the design scheme for the daycare facility and housing by removing them from their proposed natural setting, would eliminate the public view corridor that is preserved and enhanced by the proposed project and would not produce a project that enhances the existing landscape and structures. This alternative would not reduce significant and unmitigable project impacts, would cause more significant and unmitigable impacts than the proposed project due to inconsistencies with land use policy and implementing regulations, and would not achieve many of the basic project objectives integral to the design of the proposed project. This alternative is, therefore, rejected.

With regard to the objectives of the Refined Project Design, the Neighborhood Proposed Alternative would not be consistent with the scope and general intent of the planning and architectural theme envisioned for the site, would result in inappropriate land use adjacencies on the north mesa, would eliminate the public view corridor across the north mesa and would not enhance existing landscape and structures. Although this alternative would result in less than significant impacts to biological habitat, this alternative would create a new significant and unmitigable visual quality impact, would not avoid the significant and unmitigable traffic impacts and would not achieve many of the basic project objectives.

#### 8.3.4 Reduced Project Alternative

#### Description

The Reduced Project Alternative would involve scaling back the proposed project to a development level that would reduce direct project traffic impacts to less than significant levels. The project traffic engineer was consulted to define the amount of scientific research space that the Institute could construct without causing a 2.0 second delay or more at the I-5/Genesee Avenue interchange (i.e., intersections and ramps). Based on that input, it was determined that the Reduced Project Alternative would restrict the project applicant to constructing up to 40,000 additional sf of new scientific research building(s) instead of the 239,000 sf contained in the proposed project (resulting in an approximately 200,000 sf reduction in total space). The proposed daycare facility, north lawn core facility, maintenance shops/shared equipment area and greenhouse could be constructed since those uses would not generate new off-campus trips (see Table 2-1 of Appendix D, Transportation Analysis). For the purposes of this analysis, it is assumed that the new scientific research building(s) would be constructed on the east or north parking lots. The other allowable facilities would be constructed in the same locations as originally proposed, with the exception of the temporary housing, which would not be constructed as part of this alternative.

The Reduced Project Alternative would generate approximately 320 ADT, which would reduce peak hour trips under significance thresholds for the affected intersection, thus avoiding direct impacts.

Adoption of the Reduced Project Alternative would restrict the campus to approximately 300,000 sf total (including existing space). This alternative would allow the Institute to demolish and reconstruct replacement space for the 29,000 sf of existing temporary buildings. This alternative would substantially reduce the parking requirements (by approximately 500 spaces) of the proposed project and would eliminate one of the underground parking garages.

Adoption of this alternative would require City of San Diego approval of amendments to existing permits, a Master PDP, an SDP/CDP and TM. The project applicant would likely propose a MHPA boundary correction and/or habitat addition, rather than a boundary adjustment because all new construction would be placed on the developed portions of the site. No building height deviation would be required for this alternative.

#### Environmental Analysis.

The Reduced Project Alternative would avoid significant and unmitigable traffic/circulation impacts of the proposed project and would reduce project impacts to biological resources, visual quality/neighborhood character, historical resources, air quality, noise, hydrology/water quality and paleontology as described below.

Land Use – Adoption of this alternative would be consistent with the scientific research use envisioned for the site in the Community Plan. The Reduced Project Alternative would result in approximately 200,000 sf less scientific research space than allowed on site by the Community Plan. Similar to the proposed project, the Reduced Project Alternative would be consistent with policies in the General Plan, Community Plan and North City LCP. This alternative would be consistent with land use policies in the Community Plan and Coastal Overlay Zone implementing regulations that protect views of the ocean and scenic coastal areas from Torrey Pines Scenic Drive, since new construction would occur on the east parking or at the west end of the north parking lot where site elevations are low (see the Visual Quality/Neighborhood Character discussion that follows). Similar to the proposed project, this alternative would comply with regulations contained in the SDMC pertaining to zoning and ESL, but new construction on the east parking lot would impact the historic landscaping and spatial relationships associated with the original laboratory building.

Visual Quality/Neighborhood Character – The Reduced Project Alternative would modify the existing character of the site by constructing a new building(s) on the property, although the intensity of new construction would be substantially reduced. By reducing the scientific research development potential by nearly 200,000 sf, the new building(s) would likely be single level structure(s) on one of the two surface parking lots on site, rather than the two- to four-level structures on both parking lots. In addition, only one underground parking garage would be constructed. If new scientific research construction only occurs on the east parking lot, impacts to existing views of the ocean and scenic coastal areas would be avoided since no identified views exist along the adjacent segment of North

Torrey Pines Road. If new construction only occurs where the Salk Community Center Building is proposed on the north parking lot, potential encroachment into existing views from Torrey Pines Scenic Drive would be minimized or possibly avoided by this alternative due to the lower stature of the building(s) combined with the elevation change on site. Similar to the proposed project, this alternative would not conflict with land use policies in the Community Plan and Coastal Overlay Zone implementing regulations protecting views of the water and coast. No significant impacts to visual quality/neighborhood character would occur from the Reduced Project Alternative.

Biological Resources - Significant direct impacts to sensitive habitats would be reduced but not avoided by this alternative since the daycare facility would still be constructed on the undeveloped south mesa. Habitat removal due to Zone 1 brush management would likely be minimized (and possibly avoided) by this alternative since any new construction on the north mesa would be substantially smaller in size and less likely to require fuel modification in native habitat. Potentially significant indirect impacts to habitat from construction noise, human/nuisance species intrusion and grading/land development would not be avoided by this alternative. The Reduced Project Alternative would respect the 100-foot buffer required around City wetlands (i.e., southern willow scrub) in accordance with the ESL regulations. The distance between the vernal pools and new development could increase under this alternative (as compared to the proposed project) if the smaller building(s) are constructed farther to the east or on the east parking lot. Runoff into the pools could improve, assuming a drainage swale is installed around any new building(s) on the north mesa. If new construction only occurs on the east parking lot, unfiltered runoff from the existing north parking lot would continue to enter the vernal pools. If a smaller building were constructed on the north parking lot, the project applicant could avoid the need to process an MHPA boundary adjustment by keeping Zone 1 brush management out of the existing MHPA. Habitat on the north or south mesas would be likely added to the MHPA to compensate for impacts from the daycare facility; similar to the proposed project, the habitat addition would benefit the City's preserve system.

Historical Resources – Development of a new scientific research building on the east parking lot would not comply with two of the Secretary of the Interiors' Rehabilitation Standards and Guidelines for Historic Properties, resulting in similar impacts to spatial relationships and historic landscaping as the proposed project. If new building construction only occurs on the north parking lot, the Reduced Project Alternative would avoid these potential impacts. Potentially significant project impacts to Camp Callan-era historic archaeological resources and unknown prehistoric archaeological resources would not be avoided by this alternative since such resources could occur on most of the north mesa (Camp Callan-era resources) and/or the rest of the project site (prehistoric archaeological resources). Non-compliance with the Secretary of the Interior's standards and the potential disturbance of historic and/or prehistoric archaeological resources would result in a significant impact to historical resources.

Traffic/Circulation - The Reduced Project Alternative would reduce daily trips generated by the proposed project by approximately 1,360 ADT. Peak hour trips would also be substantially reduced

under this alternative (i.e., less than 50 trips during peak hour). This trip reduction would eliminate significant and unmitigable direct project impacts to the I-5/Genesee Avenue interchanges (intersections and ramps) during Buildout conditions since delay changes associated with 320 trips would be less than 2.0 seconds (the City's significance threshold for intersections). Cumulative impacts to the interchange would remain unmitigable because of degraded existing and future conditions and the lack of secure funding for the interchange improvements. The demand for on site parking would also be substantially reduced by this alternative. Similar to the proposed project, all displaced parking and new parking demand would be accommodated on site through the construction of a parking garage beneath the proposed building(s). No impacts to beach or campus parking would arise for this alternative.

Air Quality – Development of the Reduced Project Alternative would produce less air emissions during construction and operation than the proposed project. Pollutant emissions for this alternative would not exceed the City's significance thresholds, violate any air quality standards or contribute substantially to an air quality violation since the alternative would involve less construction and produce less traffic than the proposed project. Similar to the proposed project, this alternative would not expose sensitive receptors to substantial pollutant concentrations nor would significant quantities of hazardous emissions be produced.

Noise – Under the Reduced Project Alternative, new permanent sources of roadway noise and daycare noise would be created. Traffic noise impacts would be less than the proposed project, due to the trip reduction noted above, and would result in less than significant impacts similar to the proposed project. No significant noise impacts are anticipated from the proposed daycare facility either. In addition, periodic construction noise would result from development of the daycare facility, north lawn core facility, maintenance/storage area and new or replacement laboratory building(s). Due to the presence of residences near the southern property boundary, potentially significant construction noise impacts would not be avoided by this alternative.

Hydrology/Water Quality – This alternative would not substantially increase the amount of impervious surfaces and runoff from the site. As with the proposed project, runoff would be handled by the existing storm drain and drainage network in the project area. Operational effects to water quality caused by minor increases in urban runoff would be precluded by compliance with the City Stormwater regulations. Similar to the proposed project, the potential construction-related water quality impacts caused by the erosion of disturbed soils and sedimentation of downstream waters would be avoided through the implementation of BMPs required by the City and RWQCB.

Geology – Implementation of the Reduced Project Alternative would not result in any significant geology impacts since none are anticipated with the proposed project. The Salk Fault is not located on site, as previously thought; therefore, the fault would have no significant effect on the construction of smaller scientific research building(s) on the east and north mesas. In addition, the slope stability

analysis conducted for the proposed project concluded that a low potential for slope instability exists on site. Standard design, engineering and construction practices would prevent any potential impacts from seismic ground acceleration, soil erosion, expansive soils and oversize materials. Similar to the proposed project, the Reduced Project Alternative would result in no significant geology impacts.

Paleontological Resources — Potentially significant impacts to buried fossil resources would be less than the proposed project since excavation to install a second underground parking garage would not be implemented with the Reduced Project Alternative. However, grading or excavation on the site could disturb geologic formations containing a moderate to high resource potential. Similar to the proposed project, significant impacts are anticipated.

#### Conclusion

The Reduced Project Alternative would not avoid potentially significant project impacts to historic resources. It would, however, allow the Institute the option to avoid disturbing known historic resources in the east parking lot. Traffic/circulation levels would be substantially less than the proposed project and significant impacts at the freeway interchange would be avoided. Cumulative traffic impacts would remain significant and unmitigable due to the degraded condition of the interchange. Impacts to biological resources would be less than the proposed project because habitat disturbance from the housing component of the project and grading and Zone 1 brush management on the north mesa would not occur. Potentially significant indirect impacts to habitat and species in the MHPA would be similar to that of the proposed project. Impacts to historic resources (archaeology), visual quality/neighborhood character, air quality, noise, hydrology/water quality, geology and paleontology would be similar to or less than those anticipated for the proposed project.

Although the Reduced Project Alternative would be consistent with the planning and architectural theme envisioned for the site and would substantially avoid significant traffic impacts of the proposed project, it would not accomplish the basic project objectives of allowing the campus to reach its 500,000 sf capacity, implementing the tri-partite scheme, providing centralized facilities for the Institute, and developing temporary housing. The amount of new scientific research space allowed by the Reduced Project Alternative would be insufficient for the Institute's needs and the campus would not realize its expansion goals nor could all the scientific research-and support needs be housed in a 40,000 sf building(s); therefore, the Reduced Project Alternative is rejected.

With regard to the Refined Project Design, the Reduced Project Alternative would be consistent with the planning and architectural theme envisioned for the site and would allow for the removal of temporary buildings. However, it would not accomplish the basic project objectives of providing as much state of the art scientific research space as possible on site, centralized facilities for the institute and it would not enhance or expand environmental protection on sensitive resources on site as much as the Refined Project Design would. Although it would substantially reduce traffic impacts, it would

result in greater impacts to biological resources than the Refined Project Design (as discussed in the Preface to the Final EIR).

#### 8.3.5 East Parking Lot Impact Avoidance Alternative

#### Description

The East Parking Lot Impact Avoidance. Alternative would involve implementation of a project similar in components and layout to the proposed project, but scaled back to eliminate the Torrey East scientific research (laboratory)/reception building and the underground parking structure beneath the Torrey East Building. Significant impacts to historical resources related to the spatial associations and landscaping of the existing east parking lot would be avoided under the East Parking Lot Impact Avoidance Alternative. Rather than construct the proposed Torrey East Building and two-level underground parking garage on the site of the existing east parking lot, the existing surface parking lot and landscaping (and associated historical resources) would be left intact, the existing utilities near that corner of the site would be preserved in place under this alternative, and the sewer and water connections proposed to serve the Torrey East Building would not be constructed. Other than these changes, this alternative would be identical to the proposed project in design and layout, with the remaining facilities to be constructed in the same locations as originally planned and the demolition of the temporary buildings still taking place. The new net square footage that would be built on the Salk campus under this alternative would total 144,800 sf, for a campus-wide total of 405,600 sf (i.e., including 260,800 sf of existing space).

This alternative would substantially reduce the parking requirements for the proposed project (by approximately 300 spaces) and would eliminate one of the underground parking garages (which would house approximately 480 spaces). This alternative would thus reduce the amount of parking provided on campus and would also reduce the demand for parking (as there would be fewer people employed at the Institute due to the lack of new laboratory space); however, even with the retention of the existing east parking lot, not enough spaces would be provided on the campus to support the parking requirement of the East Parking Lot Impact Avoidance Alternative. Parking-related traffic/circulation issues for this alternative are discussed below.

Adoption of the East Parking Lot Impact Avoidance Alternative would require City of San Diego approval of amendments to existing permits, a Master PDP, an SDP/CDP and VTM. The project applicant would also be required to obtain approval of an MHPA boundary adjustment. Avoidance of impacts to historic landscaping and spatial associations would result in this alternative being consistent with the Interior Secretary's Standards for Rehabilitation of Historic Properties.

#### **Environmental Analysis**

Land Use – Adoption of this alternative would be consistent with the scientific research use envisioned for the site in the Community Plan. The East Parking Lot Impact Avoidance Alternative would result in approximately 94,200 sf less than allowed on site by the Community Plan since the Torrey East Building would not be constructed. Similar to the proposed project, this alternative would be consistent with policies in the General Plan, Community Plan and North City LCP and would comply with regulations contained in the SDMC pertaining to zoning and ESL. As no new construction would occur on the site of the existing east parking lot, impacts to the historic landscaping and spatial relationships associated with the original laboratory building that would occur under the proposed project would be avoided under this alternative, as discussed below under Historic Resources.

Visual Quality/Neighborhood Character – Like the proposed project, the East Parking Lot Impact Avoidance Alternative would modify the existing character of the site by constructing new buildings on the property, although the intensity of new construction would be reduced. The development potential of the campus would be reduced by 94,200 sf, and only one underground parking garage would be constructed, on the north mesa. The existing setback to North Torrey Pines Road would be maintained. Similar to the proposed project, this alternative would not conflict with land use policies in the Community Plan and Coastal Overlay Zone implementing regulations that protect views of the ocean and scenic coastal areas. Impacts to visual quality/neighborhood character would be less than significant under this alternative.

Biological Resources - As the reduction in development under this alternative would occur only in developed areas of the campus, significant direct impacts to sensitive habitats would be identical to those assessed for the proposed project. Habitat removal due to grading and Zone 1 brush management under this alternative would also be identical to the proposed project, as would the potentially significant indirect impacts to habitat from construction noise, invasive species introduction and grading/land development. As fewer eucalyptus trees would be removed under this alternative, the potential for impacts to raptors would also be lower. Similar to the proposed project, the East Parking Lot Impact Avoidance Alternative would respect the 100-foot buffer required around City wetlands (i.e., southern willow scrub) in accordance with the ESL regulations. Similar to the proposed project, the distance between the vernal pools and campus development on the north mesa would increase under this alternative, and runoff into the pools would improve as unfiltered runoff from the existing north parking lot would no longer enter the vernal pools due to the drainage swale that would be installed around the new buildings on the north mesa. The project applicant would need to process an MHPA boundary adjustment under this alternative, as with the proposed project. Similar to the proposed project, the habitat addition would benefit rather than impact the City's preserve system; nonetheless, direct and indirect impacts to habitat would occur and such impacts would be significant.

Historical Resources – The proposed project's development of a new scientific research building on the east parking lot would not comply with two of the Secretary of the Interiors' Rehabilitation Standards and Guidelines for Historic Properties, resulting in impacts to spatial relationships and historic landscaping. Conversely, the East Parking Lot Impact Avoidance Alternative would leave the existing east parking lot and its landscaping intact; therefore, such impacts would be fully avoided. Potentially significant project impacts to Camp Callan-era historic archaeological resources or unknown prehistoric archaeological resources would not be avoided by this alternative since such resources could occur on the project site.

Traffic/Circulation — The East Parking Lot Impact Avoidance Alternative would generate less ADT than the proposed project. Peak hour trips would also be reduced under this alternative. This trip reduction would reduce impacts to the I-5/Genesee Avenue interchanges (intersections and ramps) during Buildout conditions, but project and cumulative impacts would remain significant and unmitigable since delay changes associated with this alternative would be greater than 2.0 seconds (the City's significance threshold for intersections). The demand for on-site parking would also be reduced by this alternative due to the elimination of the Torrey East Building. A portion of the new parking demand would be accommodated on site through the construction of a parking garage adjacent to the proposed Salk Community Center Building; however, the 480-space, two-level underground parking garage would not be built on the east parking lot under this alternative. While the existing surface east parking lot would remain in use on site, without the addition of the Torrey East Building parking garage, the surface lot and northern parking garage would not satisfy the parking requirements for this alternative and significant impacts to parking supply would occur that would not be expected for the proposed project. Impacts to beach or campus parking could arise due to the parking shortfall for this alternative, as the Institute would need to use street parking to compensate for the shortfall.

Air Quality – Development of the East Parking Lot Impact Avoidance Alternative would produce less air emissions during construction and operation than the proposed project. Pollutant emissions for this alternative would not exceed the City's significance thresholds, violate any air quality standards or contribute substantially to an air quality violation since the alternative would involve less construction and produce less traffic than the proposed project. Similar to the proposed project, this alternative would not expose sensitive receptors to substantial pollutant concentrations nor produce significant quantities of hazardous emissions.

Noise – Under the East Parking Lot Impact Avoidance Alternative, new permanent sources of roadway noise and daycare noise would be created. Traffic noise impacts would be less than the proposed project, due to the trip reduction noted above, and would result in less than significant noise impacts, similar to the proposed project. Furthermore, no significant noise impacts are anticipated from the proposed daycare facility. In addition, periodic construction noise would result from development of the daycare facility, residential units, Salk Community Center Building, north lawn core facility, maintenance/storage area and new or replacement laboratory building(s). Due to the presence of

residences near the southern property boundary, potentially significant construction temporary noise impacts would not be avoided by this alternative.

Hydrology/Water Quality — This alternative would not substantially increase the amount of impervious surfaces and runoff from the project site. As with the proposed project, runoff would be handled by the existing storm drain and drainage network in the project area. Similar to the proposed project, the potential construction-related water quality impacts caused by the erosion of disturbed soils and sedimentation of downstream waters would be avoided through the implementation of BMPs required by the City and RWQCB. Operational effects to water quality caused by minor increases in urban runoff would be precluded by compliance with the City Stormwater regulations.

Geology – Implementation of the East Parking Lot Impact Avoidance Alternative would not result in any significant geology impacts since none are anticipated with the proposed project. The Salk Fault is not located on site, as previously thought; therefore, the fault would have no significant effect on the construction of the proposed building(s) on the north and south mesas. In addition, the slope stability analysis conducted for the proposed project concluded that a low potential for slope instability exists on site. Standard design, engineering and construction practices would prevent any potential impacts from seismic ground acceleration, soil erosion, expansive soils and oversize materials.

Paleontological Resources — Potentially significant impacts to buried fossil resources would be less than the proposed project since excavation to install a second underground parking garage would not be implemented with the East Parking Lot Avoidance Alternative. However, grading or excavation on the site would disturb the Scripps and Lindavista geologic formations, which contain a moderate to high resource sensitivity. Similar to the proposed project, significant impacts to paleontology are anticipated.

#### Conclusion

The East Parking Lot Impact Avoidance Alternative would allow the Institute to avoid disturbing known historic resources (i.e., landscaping and spatial relationships) in the east parking lot; thus impacts to historic resources would be less than the proposed project. While traffic/circulation levels would be less than under the proposed project, significant and unmitigable project and cumulative impacts at the freeway interchange would not be avoided. New significant impacts to parking supply caused by the loss of an underground parking structure associated with this alternative would not occur under the proposed project. The reduction in development under this alternative would only occur in the developed portion of the campus; as such, impacts to biological resources would be identical to the proposed project because the same amount of habitat would be directly impacted. The potential for impacts to raptors would be lower under this alternative due to the removal of fewer trees than under the proposed project. Potentially significant indirect impacts to habitat and species in the MHPA would be similar to that of the proposed project. Impacts to archaeological resources, air

quality, noise, hydrology/water quality, geology and paleontology would be similar to or less than those anticipated for the proposed project.

The East Parking Lot Impact Avoidance Alternative would be consistent with the scope, planning and architectural theme envisioned for the site and would substantially avoid some of the historical resources impacts of the proposed project. It would not, however, accomplish the basic project objectives of developing new scientific research space, allowing the campus to reach its 500,000 sf-capacity, providing centralized facilities for the Institute, satisfying the parking needs of the entire facility, and allowing for the removal of all temporary buildings on the property. Eliminating the scientific research space inside the Torrey East Building would substantially reduce the Institute's ability to attract talented researchers and to attract research funding. Due to the fact that scientific research space and parking associated with the Torrey East Building would not be constructed under the East Parking Lot Impact Avoidance Alternative, this alternative would not allow the campus to fully realize its expansion goals and it would not provide sufficient parking to service the other remaining buildings.

With regard to the Refined Project Design, the East Parking Lot Impact Avoidance Alternative would be consistent with the scope of the design scheme envisioned for the site but would not accomplish the basic project objectives of the Refined Project Design, including developing new scientific research facilities, providing centralized facilities, satisfying the parking needs of the site, and allowing for the removal of all temporary buildings on campus. In addition, it would not enhance or expand environmental protection of sensitive areas to the degree that the Refined Project Design would. It would also result in greater impacts to biological resources than the Refined Project Design.

#### 8.4 SUMMARY OF PROJECT ALTERNATIVES

Table 8-1, Project Alternatives Summary of Impacts, compares the significance of the potential impacts for the proposed project and for each of the alternatives considered in detail. The project alternatives discussed in this section reduce one or more significant environmental impacts anticipated as a result of the proposed project. Although the No Project Alternative would result in minimal environmental impacts, the State CEQA Guidelines require identification of an alternative other than the No Project Alternative as Environmentally Superior. Because it would reduce the severity of significant and unmitigable traffic impacts identified for the proposed project relative to the other project alternatives, the Reduced Project Alternative is considered to be the Environmentally Superior Alternative.

## Table 8-1 PROJECT ALTERNATIVES SUMMARY OF IMPACTS

Environmental Issue	Proposed Project	No Project/No Development Alternative	Alternative Salk Community Center Building Layout	North Mesa Intensified Development Alternative	Neighborhood Proposed Alternative	Reduced Project Alternative	East Parking Lot Impact Avoidance Alternative
Land Use	LS	N	LS	LS	LS	LS	LS
Visual Quality/ Neighborhood Character	LS	N	SU	SU	SU	LS	LS
Biological Resources	SM	N	SM	SM	SM	SM	SM
Historical Resources	SM	N	SM	SM	SM	SM	SM
Traffic/ Circulation	SÚ	N	SU	SU	SU	LS	SU
Air Quality	LS	N	LS	LS	LS	LS	LS
Noise	SM	N	SM	<del>LS</del> SM	<del>LS</del> SM	SM	SM
Hydrology/ Water Quality	LS	N	LS	LS	LS	LS	LS
Geology	LS	. N_	LS	LS	LS	LS	LS
Paleontological Resources	SM	N	SM	SM	SM	SM	SM

<sup>\*</sup> Only the environmental effects found to be significant for the proposed project are included in this comparison matrix. SU=Significant and Unmitigable; SM=Significant but mitigable; LS=Less than significant; N=No impact.

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#### 11.0 CERTIFICATION PAGE

This document has been completed by the City of San Diego's Environmental Analysis Section under the direction of the Development Services Department Environmental Review Manager and is based on independent analysis and determinations made pursuant to the San Diego Municipal Code Section 128.0103. The following staff and consultants contributed to the content of this report.

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## MITIGATION MONITORING AND REPORTING PROGRAM

SALK INSTITUTE MASTER PLAN

PROJECT NO. 44675 SCH NO. 2004111049

June 2008

# MITIGATION MONITORING AND REPORTING PROGRAM for the SALK INSTITUTE MASTER PLAN (PROJECT NO. 44675; SCH NO. 2004111049)

This Mitigation Monitoring and Reporting Program (MMRP) was prepared for the Salk Institute Master Plan project to comply with the mitigation monitoring statute, Public agency shall adopt monitoring program of mitigation measures and insure their enforceability (Public Resources Code Section 21081.6). This statute requires public agencies to "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." This program shall be made a requirement of project approval. Certain changes or alterations (mitigation measures) are required for the Salk Institute Master Plan project, as identified in the Environmental Impact Report (EIR) (Project No. 44675, SCH No. 2004111049), to reduce significant environmental effects. For each required mitigation measure, a monitoring and/or reporting element is identified below.

As Lead Agency for the project under CEQA, the City of San Diego (City) will administer the MMRP for the Salk Institute Master Plan project. Information contained within this MMRP provides a summary of significant project impacts, and identifies the mitigation measures, the entity responsible for ensuring compliance, conditions required to verify compliance, and the monitoring schedule. Tables and figures referred to in this MMRP can be found in the EIR.

#### GENERAL

- 1. Prior to issuance of a Notice to Proceed (NTC), the Assistant Deputy Director (ADD) Environmental Designee of the Entitlements Division shall verify that Mitigation Measures 5.4-1 through 5.4-14 (Historical Resources) and 5.10-1 through 5.10-5 (Paleontological Resources) have been included in their entirety on the submitted construction documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Preconstruction Meeting shall be noted on all construction documents.
- 2. Prior to the commencement of work, a Preconstruction Meeting (Pre-con) shall be conducted and include the City of San Diego's Mitigation Monitoring Coordination (MMC) Section, Resident Engineer, Building Inspector, Project Biologist, Project Archaeologist and Paleontologist, Applicant and other parties of interest.
- 3. Evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

#### A. BIOLOGICAL RESOURCES

Impacts to sensitive upland habitats total less than 0.1 acre (i.e., 0.08 acre) and thus are not considered significant according to the City's significance guidelines. No impacts would occur to wetland or riparian habitats, southern willow scrub, or vernal pools. No mitigation for habitat impacts is required. A total of approximately 7.82 acres of habitat would be preserved on site. A net 1.27 acres is proposed to be added to the MHPA preserve. Preserved habitats include maritime succulent scrub, Diegan coastal sage scrub (including disturbed), southern maritime chaparral, southern mixed chaparral, nonnative grassland, southern willow scrub, and vernal pools.

The following measure would reduce potential biological resource impacts to nesting raptors to below a level of significance.

If removal of any eucalyptus trees or other trees used by raptors for nesting within the development area for the Torrey East Building and greenhouses is proposed during the raptor breeding season (February 1 through September 15), a qualified biologist shall ensure that no raptors are nesting in such trees, to the satisfaction of the Mayor/Environmental Designee. If construction occurs during the raptor breeding season, a preconstruction survey shall be conducted and no construction shall occur within 300 to 500 feet of any occupied nest(s) until the young fledge. Should the biologist determine that raptors are nesting, the trees shall not be removed until after the breeding season.

To ensure Habitat Management Plan (HMP) implementation, the following measure that requires applicant funding for the HMP endowment is provided.

5.3-2 Prior to issuance of the first grading permit which would allow the disturbance of native habitat, the project applicant shall fully fund the Habitat Management Plan endowment of \$44,500.

Indirect impacts due to noise, brush management/invasive species intrusion, and grading/land development are potentially significant despite compliance with City regulations and the MSCP Subarea Plan; however, measures described below would mitigate such impacts to a level less than significant and ensure that the proposed project is in conformance with the MSCP Land Use Adjacency Guidelines.

Prior to the first pre-construction meeting for the Salk Community Center Building, north lawn core facility and northern parking structure, the Mayor/Environmental Designee shall verify that the MHPA boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

- No clearing, grubbing, grading, or other construction activities shall occur within 500 feet of the MHPA between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the Mayor/Environmental Designee:
  - A. A qualified biologist (possessing a valid ESA Section 10(a)(1)(A) Recovery Permit) shall survey appropriate habitat (coastal sage scrub) areas within the off-site MHPA that lie within 500 feet of the project footprint and would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the coastal California gnatcatcher. If no appropriate habitat is present then the surveys will not be required. If appropriate habitat is present, surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If gnatcatchers are present within the MHPA, then the following conditions must be met:
    - I. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted within the MHPA. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and
    - II. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied gnatcatcher habitat within the MHPA. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the Mayor/Environmental Designee at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
    - III. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat (within the MHPA) occupied by the coastal

California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring\* shall be conducted at the edge of the occupied habitat area within the MHPA to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16).

\*Construction noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat within the MHPA are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the Mayor/Environmental Designee, as necessary, to reduce noise levels within occupied MHPA habitat to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

If coastal California gnatcatchers are not detected within the MHPA during the protocol survey, the qualified biologist shall submit substantial evidence to the Mayor/Environmental Designee and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and August 15 as follows:

- If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then Condition A.III shall be adhered to as specified above.
- If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.
- Prior to issuance of any grading permits for projects adjacent to the MHPA, the City shall review the final landscaping plan(s) for the Salk Community Center to ensure that plants in any category of the California Invasive Plant Council (Cal-IPC) 2006 list, or otherwise known to the City to be invasive species, are not being used.
- Prior to grubbing, clearing, and/or grading for the Salk Community Center Building and northern parking garage, a pre-construction meeting shall be conducted with the project biologist and the construction supervisors. All sensitive areas to be avoided shall be flagged, and the contractors shall be informed regarding no-entry areas.
- 5.3-6 Prior to grubbing, clearing, and/or grading for the Salk Community Center Building and northern parking garage, the entire limits of grading shall be fenced with silt fencing and



orange construction fencing to preclude entry into sensitive MHPA or other preserved areas.

5.3-7 During grading for the Salk Community Center Building and northern parking garage, a biological monitor shall conduct site visits to assure that construction personnel and equipment do not encroach upon any sensitive areas.

#### B. HISTORICAL RESOURCES

The following measures would reduce potential historical resource impacts related to spatial relationships and the east parking lot landscaping, associated with Rehabilitation Standards 2 and 9, to below a level of significance.

- All healthy Chinese Fringe trees shall be carefully removed from the planting beds within the existing east parking lot and replanted as part of the landscaping for the proposed Torrey East Building. The trees shall remain in proximity to their original location and provide a tangible link to the history of the site.
- The landscape concept plan shall restore as much of the Institute's original perimeter plantings as possible, as shown in the Landscape Design Guidelines. The Institute shall inventory its existing perimeter plantings, assess the health of individual specimens and replant as necessary. Replanted trees, especially those surrounding the Kahn-designed portions of the Institute, shall be identical to those species originally planted and identified on the 1965 Landscape Plan, and other landscaping shall use the same "palette" of species as that identified on the 1965 Landscape Plan, to the extent practicable given existing City regulations.
- 5.4-3 The final design for the Torrey East Building shall feature a ground-level, two-story transparent atrium space designed to permit limited visibility along the same axis as the courtyard of the original laboratory building, in accordance with the Architectural Design Guidelines.

The following measures would avoid or reduce potential impacts to Camp Callan-related historic-era archaeological resources on the north mesa to below a level of significance.

#### 5.4-4 Prior to Permit Issuance

#### (A) Entitlements Plan Check

1. Prior to Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building



Plans/Permits, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for archaeological monitoring have been noted on the appropriate construction documents.

### (B) Letters of Qualification have been submitted to ADD

- 1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
- 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project.
- 3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the monitoring program.

#### 5.4-5 Prior to Start of Construction

#### (A) Verification of Records Search

- 1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was inhouse, a letter of verification from the PI stating that the search was completed.
- 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
- The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

### (B) PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist Monitor shall attend any grading/excavation

related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.

a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

### 2. Identify Areas to be Monitored

- a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
- b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

### 3. When Monitoring Will Occur

- a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
- b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

# 5.4-6 During Construction

# (A) The Monitor Shall Be Present During Grading/Excavation/Trenching

- 1. The Archaeological Monitor shall be present full-time during grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Native American monitor shall determine the extent of their presence during construction related activities based on the AME and provide that information to the PI and MMC. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities.
- 2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of

monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered may reduce or increase the potential for resources to be present.

### (B) Discovery Notification Process

- 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
- 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
- 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

### (C) Determination of Significance

- 1. The PI shall evaluate the significance of the resource.
  - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
  - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume.
  - c. If resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

# 5.4-7 Night and/or Weekend Work

### (A) If night and/or weekend work is included in the contract

- 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Precon Meeting.
- 2. The following procedures shall be followed.

#### a. No Discoveries

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.

#### b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV - Discovery of Human Remains.

- c. Potentially Significant Discoveries

  If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III During Construction shall be followed.
- d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.

#### (B) If night and/or weekend work becomes necessary during the course of construction

- 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
- 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- (C) All other procedures described above shall apply, as appropriate.

### 5.4-8 Post-Construction

# (A) Preparation and Submittal of Draft Monitoring Report

- The PI shall submit two copies of the Draft Monitoring Report (even if negative),
  prepared in accordance with the Historical Resources Guidelines (Appendix C/D)
  which describes the results, analysis, and conclusions of all phases of the
  Archaeological Monitoring Program (with appropriate graphics) to MMC for
  review and approval within 90 days following the completion of monitoring,
  - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.
  - b. Recording Sites with State of California Department of Parks and Recreation The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
- 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.
- 3. The PI shall submit revised Draft Monitoring Report to MMC for approval.
- 4. MMC shall provide written verification to the PI of the approved report.
- 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

#### (B) <u>Handling of Artifacts</u>

- 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
- The PI shall be responsible for ensuring that all artifacts are analyzed to identify
  function and chronology as they relate to the history of the area; that faunal
  material is identified as to species; and that specialty studies are completed, as
  appropriate.
- 3. The cost for curation is the responsibility of the property owner.

# (C) Curation of artifacts: Accession Agreement and Acceptance Verification

- 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
- 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

### (D) Final Monitoring Report(s)

- 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
- The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

The following measures would avoid or reduce potential impacts to unknown prehistoric archaeological resources on the project site to below a level of significance.

#### 5.4-9 Prior to Permit Issuance

#### (A) Entitlements Plan Check

 Prior to Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for archaeological monitoring and Native American monitoring have been noted on the appropriate construction documents.

#### (B) Letters of Qualification have been submitted to ADD

1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If

applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.

- 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project.
- 3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the monitoring program.

### 5.4-10 Prior to Start of Construction

### (A) Verification of Records Search

- 1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
- 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
- 3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

#### (B) PI Shall Attend Precon Meetings

- 1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.
  - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.



### 2. Identify Areas to be Monitored

- a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
- b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

## 3. When Monitoring Will Occur

- a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
- b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

# 5.4-11 During Construction

# (A) The Monitor Shall Be Present During Grading/Excavation/Trenching

- 1. The Archaeological Monitor shall be present full-time during grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Native American monitor shall determine the extent of their presence during construction related activities based on the AME and provide that information to the PI and MMC. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities.
- 2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil

formations, or when native soils are encountered may reduce or increase the potential for resources to be present.

## (B) <u>Discovery Notification Process</u>

- 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
- 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
- 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

## (C) Determination of Significance

- 1. The PI AND Native American Monitor shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in MM 5.4-11 below.
  - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
  - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume.
  - c. If resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

#### 5.4-12 Discovery of Human Remains

If human remains are discovered, work shall halt in that area and the following procedures as set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

#### (A) Notification

- 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS).
- 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

### (B) <u>Isolate discovery site</u>

- 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
- 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
- 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

### (C) If Human Remains ARE determined to be Native American

- 1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call.
- 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
- 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with the California Public Resource and Health & Safety Codes.
- 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
- 5. Disposition of Native American Human Remains shall be determined between the MLD and the PI, IF:
  - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission; OR;
  - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner.

- c. In order to protect these sites, the Landowner shall do one or more of the following:
  - (1) Record the site with the NAHC;
  - (2) Record an open space or conservation easement on the site;
  - (3) Record a document with the County.
- d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.

### (D) If Human Remains are NOT Native American

- 1. The PI shall contact the Medical Examiner and notify them of the historic era
- 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
- 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner and the Museum of Man.

## 5.4-13 Night and/or Weekend Work

### (A) If night and/or weekend work is included in the contract

- 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Precon Meeting.
- 2. The following procedures shall be followed.
  - a. No Discoveries

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.

#### b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV - Discovery of Human Remains.

- c. Potentially Significant Discoveries

  If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III During Construction shall be followed.
- d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- (B) If night and/or weekend work becomes necessary during the course of construction
  - 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
  - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- (C) All other procedures described above shall apply, as appropriate.

### 5.4-14 Post-Construction

#### (A) Preparation and Submittal of Draft Monitoring Report

- 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring,
  - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.
  - b. Recording Sites with State of California Department of Parks and Recreation
    The PI shall be responsible for recording (on the appropriate State of
    California Department of Park and Recreation forms-DPR 523 A/B) any
    significant or potentially significant resources encountered during the
    Archaeological Monitoring Program in accordance with the City's Historical
    Resources Guidelines, and submittal of such forms to the South Coastal
    Information Center with the Final Monitoring Report.

- 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.
- 3. The PI shall submit revised Draft Monitoring Report to MMC for approval.
- 4. MMC shall provide written verification to the PI of the approved report.
- 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

# (B) Handling of Artifacts

- 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
- 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- 3. The cost for curation is the responsibility of the property owner.

### (C) Curation of artifacts: Accession Agreement and Acceptance Verification

- 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
- 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

#### (D) Final Monitoring Report(s)

- 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
- 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final

Monitoring Report from MMC which includes the Acceptance Verification from the curation institution

#### C. TRAFFIC AND CIRCULATION

Mitigation for project impacts to the intersection of I-5/Genesee Avenue would involve payment of fair-share fees by the project applicant and others that would contribute funding toward planned intersection improvements. The improvements would replace the Genesee Avenue overpass at I-5, install two additional lanes and dual left turn lanes along Genesee Avenue and make freeway ramp meter changes. Since the improvements to the I-5/Genesee intersection are not assured at this time, direct and cumulative impacts would remain significant and unmitigable until such improvements are constructed, despite the implementation of the following mitigation measures.

- 5.5-1 Prior to issuance of a certificate of occupancy on project buildings that would contribute new traffic, the project applicant shall contribute funds at a rate of \$1,000.00 per trip impacting the freeway, up to \$353,000.00 (see Table 9-9 in Appendix D), for regional improvements at the I-5/Genesee Avenue intersection, to the satisfaction of the City Engineer. This contribution shall be paid as certificate of occupancy permit(s) are issued during the phased project buildout.
- 5.5-2 The project applicant shall continue to participate in the current TDM shuttle arrangement. Prior to certificate of occupancy on buildings that would create new traffic, the applicant shall determine whether it will continue to participate in the current arrangement or begin to provide a private shuttle service for its employees between the project site and the regional transit centers. Regardless of which shuttle arrangement is chosen, the applicant shall provide transit pass subsidies for its employees and provide a kiosk or bulletin board on the campus displaying information on transit uses, carpooling, and other forms of ridesharing.

#### D. NOISE

The following construction noise control measures shall be incorporated into the contractor specifications and used to reduce temporary construction noise to below significant levels:

5.7-1 Prior to the commencement of construction, the construction contractor shall contact a qualified acoustician to prepare a construction noise control plan(s). The plan(s) shall evaluate noise levels based on actual sound levels and acoustic heights of equipment proposed for use. The plan(s) shall identify appropriate methods for achieving the 75 dB L<sub>eq</sub> threshold averaged over 12 hours. Methods could include the use of noise barriers and/or operational adjustments.

- 5.7-2 Only equipment capable of performing necessary tasks with the lowest possible sound level and acoustic height shall be used.
- 5.7-3 All construction equipment shall be operated and maintained so as to minimize noise generation. Equipment and vehicles shall be kept in good repair and fitted with manufacturer- recommended mufflers.
- 5.7-4 If deemed necessary by an acoustical consultant, shielding in the form of temporary barriers shall be provided for standard activity, and portable noise screens or enclosures shall be utilized for high-noise activities/with equipment. The noise barriers used must block line-of-sight between source and receiver, be constructed of solid material and be long enough to prevent sound from flanking around the end of the barrier.

#### E. PALEONTOLOGICAL RESOURCES

The following measures would avoid or reduce potential impacts to paleontological resources below a level of significance.

#### 5.10-1 Prior to Permit Issuance

#### A. Entitlements Plan Check

1. Prior to Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents.

### B. Letters of Qualification have been submitted to ADD

- 1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.
- 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
- 3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

### 5.10-2 Prior to Start of Construction

#### A. Verification of Records Search

- 1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was inhouse, a letter of verification from the PI stating that the search was completed.
- 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

### B. PI Shall Attend Precon Meetings

- 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.
  - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

### 2. Identify Areas to be Monitored

Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

### 3. When Monitoring Will Occur

- a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
- b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.

### 5.10-3 During Construction

# A. Monitor Shall be Present During Grading/Excavation/Trenching

- The monitor shall be present full-time during grading/excavation/trenching activities
  as identified on the PME that could result in impacts to formations with high and
  moderate resource sensitivity. The Construction Manager is responsible for
  notifying the RE, PI, and MMC of changes to any construction activities.
- 2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR).

  The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.

### B. Discovery Notification Process

- 1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
- 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
- 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submitwritten documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

### C. Determination of Significance

- 1. The PI shall evaluate the significance of the resource.
  - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
  - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume.
  - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue

- to monitor the area without notification to MMC unless a significant resource is encountered.
- d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.

### 5.10-4 Night and/or Weekend Work

#### A. If night and/or weekend work is included in the contract

- When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
- 2. The following procedures shall be followed.
  - a. No Discoveries

In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via fax by 8AM on the next business day.

b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction.

- c. Potentially Significant Discoveries

  If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III During Construction shall be followed.
- d. The PI shall immediately contact MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night work becomes necessary during the course of construction
  - 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
  - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

#### 5.10-5 Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
  - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring

Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring,

- a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program shall be included in the Draft Monitoring Report.
- b. Recording Sites with the San Diego Natural History Museum

  The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
- 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.
- 3. The PI shall submit revised Draft Monitoring Report to MMC for approval.
- 4. MMC shall provide written verification to the PI of the approved report.
- 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

### B. Handling of Fossil Remains

- 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- 2. The PI shall be responsible for ensuring that all fossil remains are analyzed to identify function and chronology as they relate to the geologic history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate

#### C. Curation of fossil remains: Deed of Gift and Acceptance Verification

- 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
- 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

#### D. Final Monitoring Report(s)

- 1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
- 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.